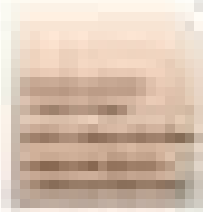
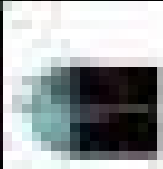


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Web Marketing & Project Management



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Exploring Web Marketing & Project Management

By Donald Emerick, Kimberlee F.

Publisher : Prentice Hall PTR

Pub Date : January 24, 2000

ISBN : 0-13-016396-1

Pages : 682

Slots : 1

Get the expert's view on marketing and communications for the Web. Learn insiders' tips for developing and implementing a business plan that works in the online community, then follow through by learning how to build a great project team and manage clients,

workers, and technology to achieve your goals.

With this interactive workbook, you'll be creating your own real outline as you work through the case studies, exercises, and labs that underscore the reading in each section. By the time you're through, you will have a complete work plan to

refer to as you manage your next project.

Exploring Web Marketing and Project Management gives you the skills to:

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- Reach the clients that are right for your business
- Develop your plans into reality
- Manage the project, the team, and the client
- Get to the product launch-and through it

- Understand the special legal issues surrounding Internet communications

Exploring Web Marketing and Project

Management is great for hands-on classroom use, self-paced study toward certification, or just as a practical guide for anyone who wants to do business on the

Worldwide Web.



- [Table of Contents](#)

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Dedications

My chapters in this book are dedicated to my father, Frank E. Morse, Sr.

I grew up in a generation that revered science fiction and Western television heroes. However, I have always been very lucky not to have to look far at all for real-life heroes. I only had to look as far as my own family.

Through my dad's direction in my youth and friendship in my adulthood, he has shown me what heroism, good character, and practicality truly means. These acts are not high profile. Rather, they are often as quiet as well-timed encouragement to another, optimism in the face of difficult circumstances, and the courage to not only follow through with responsibilities but to excel. My father never advertised that he has done all these things and more. Everyone has just always known.

*Thanks, dad, for being my hero
when I was a kid now and
always.*

Kim Round

This book is dedicated to my
father, Tracy Emerick.

Thank you for creating your
trade and sharing it with me so
completely.

Donny Emerick

From the Editor

As the Internet rapidly becomes the primary commerce and communications medium for virtually every company and organization operating today, a growing need exists for trained individuals to manage this medium. Aptly named Webmasters, these individuals will play leading roles in driving their organizations into the next millennium.

Working with the World
Organization of Webmasters

(WOW), Prentice Hall PTR has developed two book series that are designed to train Webmasters to meet this challenge. These are *The Foundations of Website Architecture Series* and *The Advanced Website Architecture Series*.

The goal of *The Foundations of Website Architecture Series* is to provide a complete, entry-level Webmaster training curriculum. This series is designed to introduce and explain the technical, business, and content management skills

that are necessary to effectively train the new Webmaster.

Books in *The Foundations of Website Architecture Series* include:

- *Understanding Web Development*
- *Administering Web Servers, Security and Maintenance*
- *Exploring Web Marketing and Project Management*

- *Creating Web Graphics, Audio and Video*

The Webmaster who masters the materials in these books will be able to build and maintain static Web sites with limited database-enabled and interactive functionality; have a working knowledge of server administration, multi-media technologies, and security issues; and be able to interface with IT and content development professionals on these topics. The Webmaster will understand the basics of

Web marketing and effective communication and know how to manage the creation and construction of Web sites and manage teams of professionals responsible for Web communication and have a firm understanding of the various Web technologies.

The Advanced Website Architecture Series offers more in-depth coverage of the content, business, and technical issues that challenge Webmasters. Books in this series are:

- *Designing Web Interfaces, Hypertext and Multimedia*
- *Supporting Web Servers, Networking, Programming, and Emerging Technologies*
- *Exploring Electronic Commerce, Site Management, and Internet Law*

Thank you for your interest in *The Foundations of Website Architecture Series*, and good luck in your career as a Webmaster!

Karen McLean

Senior Editor

Pearson PTR Interactive

Executive Foreword

Within the next few years, you will think about the Internet in the same way you think about electricity today. Just as you don't ask your companion to "use electricity to turn on a light," you will assume the omnipresence of the Web and the capabilities that it delivers. The Web is transforming the way we live, work, and play, just as electricity changed everything for previous generations.

Every indication suggests that the explosive growth of the Web will continue. The question we need to address is, "how can we deliver the most value with this ubiquitous resource?" Today, most of the world's Web sites were created and are maintained by self-taught Webmasters. Why? Because there were limited opportunities to receive formal standards-based education. Quality accessible and affordable education will help provide the broad range of knowledge, skills, and abilities

to meet the demands of the marketplace.

Over the last three years, the World Organization of Webmasters has worked with colleges and universities, business and industry, and its own membership of aspiring and practicing Web professionals to develop the Certified Professional Webmaster (CPW) program. Our three-part goal is to provide:

- Educational institutions

with guidelines around which to develop curricula.

- Students with an organized way to master technical skills, content development proficiency, and personal workplace ability.
- Employers with a standard of achievement to assess Webmaster candidates.

The Foundations of Web Site Architecture Series and The Advanced Web Site Architecture Series grew

organically from the communities they will serve. Written by working professionals and academics currently teaching the material, and reviewed by leading faculty at major universities and the WOW Review Board of industry professionals, and published by Prentice Hall PTR, these books are designed to meet the increasingly urgent need for Webmasters with expertise in three areas: technical development, design and content development, and business.

Projections indicate greater than 25 million Web sites online worldwide by 2002. Think of these books as state-of-the-art field guides for those who will shape our online future.

William B. Cullifer
Executive Director-Founder
World Organization of Webmasters
Bill@joinwow.org

Introduction

Welcome to the wild, wild West of both personal and professional communications. It's an exciting time out in the business world and the institutional, nonprofit, and governmental world as well. Many new interactive communication technologies are being developed and utilized every day by every type of person and audience who has access to a networked computer. Students, grandparents, executives,

assistants, officers, technicians, and every other type of person are finding reasons to access the worldwide network of computer networks called the Internet using its latest "super-application," the World Wide Web.

If you are reading this book, you probably have some desire to use the Web to communicate something. If you don't, you should. While it is very easy to get involved in the technology, business, and hype surrounding the Internet and the Web, I'd like to introduce a very

important point that will be repeated in many ways throughout this publication: The Internet and World Wide Web are communications vehicles.

Networked computers and supporting database technologies utilize the client-server model of computing to provide a worldwide communications network. But a significant premise for the first half of this publication is that the Internet and World Wide Web are a means to an end. And that end is better, more

effective, and less expensive communication.

So the marketing and communication part of this book is about using the Internet and Web for marketing and communication. The majority of concepts and discussions center on traditional communications methods (mail, phone, TV, radio etc.) and how their communication qualities and functions can be adopted and improved using Internet technologies.

This book should be considered an introduction to marketing concepts that can be used on the Web. It is written for beginning Webmasters without a lot of marketing or communications experience.

It is presented to introduce nonmarketing people to marketing techniques used in Web communications. It is not designed to be a reference book for experienced marketing professional, though it can serve as a primer for marketing or communications folks who are looking for an introduction

to Web-based communication.

You'll notice that the terms *Internet* and *World Wide Web* are being used simultaneously in these paragraphs. The same is true throughout this section of the publication. Though most of the discussion in this book and series centers on the World Wide Web application, other Internet applications can and will be employed by Webmasters to communicate over the Internet. The options available to Web communicators involve more than just the Web itself, so the

Internet is regularly mentioned as a communications vehicle. The Web can also serve as a gateway to the other applications available.

Some exercises may seem quite simple but are designed to inspire thinking. We see or hear marketing and communication efforts every day but rarely understand or even pay attention to their motives or know about their development and delivery. Due to expense involved with communication, almost everything we do experience in

this media-rich culture was probably designed and paid for by somebody to reach us for some reason. We will use a number of seemingly rudimentary exercises to examine other media examples and experiences. Such dissection will lead to discussion on the best ways to communicate using the Web.

In Part II, *Exploring Web Marketing and Project Management*, you will learn how to manage the project and not let the project manage you. The Web is a new medium,

bringing with it a platform for entrepreneurs to stage initiatives, both profitable and unprofitable. The project manager, who helps bring the entrepreneur's vision into focus, is charged with a great responsibility. This individual must understand the creative, technical, and marketing process and help the project team to work toward a common goal.

Part II of this book examines the intricacies of building a Web site, from project life cycle to client management. After all,

one can find many technical documents on building a Web site, but what about the business side of building a Web site?

It's all well and good if a graphic artist can produce eye candy that will knock the user's socks off, but if the client's company is having trouble deciding on a creative direction, the skills of the graphic designer cannot be capitalized on. Project management is about managing the client through situations like these so that the

project does not bog down.

It's very easy to lose money in the process of Web development. This book focuses on how to satisfy clients through clear and precise communication. By adhering to this process, a project manager may not avoid 100% of the project pitfalls, but he or she may be able to avoid 90% while preserving the reputation of his or her Web firm.

What You Will Need

You will need a networked PC with access to the Internet. The faster the connection the less time you spend on the World Wide Wait. You will also need a Web browser with as many plug-ins as you can support to experience as much marketing media as possible and an e-mail client with an account. In your browser preferences you should enable cookies.

How This Book Is Organized

In this book, and the others in this series, you are presented with a series of interactive labs. Each lab begins with learning objectives that define what exercises (or tasks) are covered in that lab. This is followed by an overview of the concepts that will be further explored through the exercises, which are the heart of each lab.

Each exercise consists of either

a series of steps that you will follow to perform a specific task or a presentation of a particular scenario. Questions that are designed to help you discover the important things on your own are then asked of you. The answers to these questions are given at the end of the exercises, along with more in-depth discussion of the concepts explored.

At the end of each lab is a series of multiple-choice self-review questions, which are designed to bolster your learning experience by

providing opportunities to check your absorption of important material. The answers to these questions appear in [Appendix A](#) of each part of the book. There are also additional self-review questions at this book's companion Web site, found at <http://www.phptr.com/phptrinte>

Finally, at the end of each chapter you will find a Test Your Thinking section, which consists of a series of projects designed to solidify all of the skills you have learned in the chapter. If you have successfully

completed all of the labs in the chapter, you should be able to tackle these projects with few problems. There are not always "answers" to these projects, but, where appropriate, you will find guidance and/or solutions at the companion Web site.

The final element of this book actually doesn't appear in the book at all. It is the companion Web site and it is located at: <http://www.phptr.com/phptrinte>
This companion Web site is closely integrated with the content of this book, and we

encourage you to visit often. It is designed to provide a unique interactive online experience that will enhance your education. As mentioned, you will find guidance and solutions that will help you complete the projects found in the Test Your Thinking section of each chapter.

You will also find additional self-review questions for each chapter, which are meant to give you more opportunities to become familiar with terminology and concepts presented in the publications.

In the Author's Corner, you will find additional information that we think will interest you, including updates to the information presented in these publications and discussion about the constantly changing technology Webmasters must stay involved in.

Finally, you will find a Message Board, which you can think of as a virtual study lounge. Here, you can interact with other Foundations of Web site Architecture Series readers, share, and discuss your projects.

Notes to the Student

This publication and the others in the Web Site Architecture series are endorsed by the World Organization of Webmasters. The series is a training curriculum designed to provide aspiring Webmasters with the skills they need to perform in the marketplace. The skill sets included in the Web Site Architecture series were initially collected and defined by this international trade association to create a

set of core competencies for students, professionals, trainers, and employers.

Notes to the Instructor

Chances are that you are a pioneer in the education field whether you want to be one or not. Due to the explosive nature of the Internet's growth, very few Webmaster training programs are currently in existence. But while you read this, many colleges, community colleges, technical institutes, and corporate and commercial training environments are introducing this material into curriculums worldwide.

Chances are, however, that you are instructing new material in a new program. But don't fret, this publication and series are designed as a comprehensive introductory curriculum in this field. Students successfully completing this program of study will be fully prepared to assume the responsibilities of a Webmaster in the field or to engage in further training and certification the Internet communications field.

Each chapter in this book is broken down into sections. All questions and projects have the

answers and discussions associated with them. The labs and question/answer formats used in this book provide excellent opportunities for group discussions and dialogue between students, instructors, and each other. In addition, many answers and their discussions are abbreviated in this publication for space reasons. Any comments, ideas, or suggestions would be greatly appreciated.

Acknowledgments

This publication's seventh chapter discussing legal issues was created and authored by Susan Joyce with input from practicing attorneys. Susan is an instructor in the Merrimack College Webmaster Certification Program and President of Netability, a Web consultancy and development firm based in Marlboro, Massachusetts.

I'd like to thank the following

people and parties for making this book a reality:

- Bill Cullifer WOW Executive Director, for believing in training, sticking with the model, and building WOW to its prominent place.
- Bebo White, for setting up the first Web server in North America and for taking time away from physics to keep us on track.
- The Merrimack College writing team of Arlyn

Hubbel, Eric Larson, Kim Round, Brian Stephens, and Susan Joyce, for writing through the summer of 1999 after waiting through the fall, winter, and spring to begin and for being the best instructors a Program Director could ever hope for or bribe. (You too Cassie, Jim, Michelle, and Perry!)

- Karen McLean at Prentice Hall PTR, for driving this project forward and putting up with us simultaneously.

- Anneliese Mueller for being there so many, many times.
- Dawn Foss, for listening and supporting me through the challenging and chaotic moments.
- Diane Spatafore, for providing innumerable welcomed diversions and snacks.
- Leslie Dengel, for initially launching the Merrimack College Program.

- Jessica Delgaudio and Jan Brink, for keeping things running with or without me.
- And Julie Goldberg, for chatting with me.

Donny Emerick

My chapters in Exploring Web Marketing and Project Management have truly been a Round family team effort. So it is my pleasure first to acknowledge my husband, Bruce, for all of the

encouragement and support he has given me, without complaint. Because of Bruce's optimistic and supportive attitude, our young sons followed suit and have been consistently positive. I could not have started my part without the inspiration that they constantly give me to try new things, nor could I have finished it if my family had not been committed to it as well.

There are also several clients with whom I've worked closely, who have been kind enough to offer reflections and ideas for

the book. Charlie Bleau of Disabilitynews.net, Mark Frisch of New England Digital Computers, Alan McAnally of Commonwealth Sales Consulting, Christine Pasternek of Battleship Cove, and Phil Sullivan of Design Write Partners all contributed time out of their busy schedules.

I'd like to thank Doug Smith, Matt Guay (a proud new Dad to son, Riley), Jamie Boudreau, and all the guys at Netway, a great Internet service provider with whom we've worked closely. You guys are the best!

Cindy Moore and Nancy Carroll, members of the Surf's Up Web Development team, also played supportive roles in getting these sections finished.

Last, but not least, I would like to thank my coauthor, Donny Emerick, and my editor, Karen McLean at Prentice Hall, for the opportunity to address project management issues in this form. When I first began building Web sites, one could find ten books on one version of Java but very little material on how to walk a client through a Web build in an organized

fashion. A few wonderful books have been published since, which I have valued greatly. I hope this book can add further perspective for the budding Web developer.

Kim Round

About the Authors

Donny Emerick is a communications expert who has applied his oral and written communications skills in a number of fields. Literally growing up in the Business-to-Business Direct Marketing field, he has worked in the private and nonprofit sectors in high-tech marketing, education, and environmental activism, always talking, writing, and doing.

Graduating with a degree in Journalism in 1991, he started

out writing news for a local daily newspaper on the North Shore of Massachusetts. Later that year the call of the West beckoned and he relocated to the San Francisco Bay area. He consulted with Digital Equipment Corporation, facilitating lead generation marketing campaigns with technology partners and value-added re-sellers (VARs). He then organized consumers against tropical rainforest destruction and University of California students against tuition increases and social

injustices.

After a brief stint in political campaigns, he returned the East Coast in 1994 to help start Receptive Marketing Inc., a Web marketing company, and the Netplaza, a shopping portal. (This was before, when they were called Internet malls.) Since most business development involved explaining the Internet and its uses in business communication, a natural shift moved Donny to training marketers in this field.

He then spent two years on the national seminar circuits as author and trainer of *Marketing on the Internet*, produced by Data-tech Inc. He realized another personal goal by joining the staff of Greenpeace U.S. and traveling extensively in support of campaign and fund-raising efforts. He also began teaching for Merrimack College's Professional Education Center and its fledgling Webmaster Program, which he began directing in 1996.

The Merrimack College
Webmaster Certification

Program was adopted as a training model by the World Organization of Webmasters in early 1997, and Donny assumed the post of Education Coordinator for WOW in the same time frame.

Donny has a Bachelor of Arts in English/Journalism from the University of New Hampshire and has recently begun graduate courses in Business Education at New Hampshire College. His other pursuits include music production, sea kayaking, and alpine skiing. He lives in Portsmouth, New

Hampshire.

Kimberlee Round is a 1986 graduate of Merrimack College, with a B.S. in Electrical Engineering. Having spent several years as a project manager in the software development realm, Kim gravitated toward the Web from its earliest inception. The merging of creative ideas with technical skill held a fascination for her, and Kim began to build Web sites as a freelance developer. This part-time endeavor grew into a full-time business, now called Surf's Up

Web Development, Inc.
(www.surfsupweb.com), which
is located in North Andover,
Massachusetts.

In 1998, after having built over
forty Web sites, Kim developed
a Web project management
course for Merrimack College,
her alma mater. She counts
herself very fortunate to have
the opportunity to interact with
the students in the Webmaster
certification program there.

On the home front, Kim has
been happily married to her
husband, Bruce, for thirteen

years. Together, they have two sons, Christopher and Jeffrey, and a golden retriever named, Murphy. It has been rumored that Murphy truly is the CEO of Surf's Up Web Development, Inc., but this remains unsubstantiated. When not teaching at Merrimack or building Web sites, Kim enjoys her sons' activities, her husband's sense of humor, having tea with her mother, reading, and boating.

Chapter 1. Internet Marketing Basics



The Internet is a worldwide network of computers that provides a highly interactive system for marketing communication. Nothing more and nothing less.

Donny Emerick

Chapter Objectives

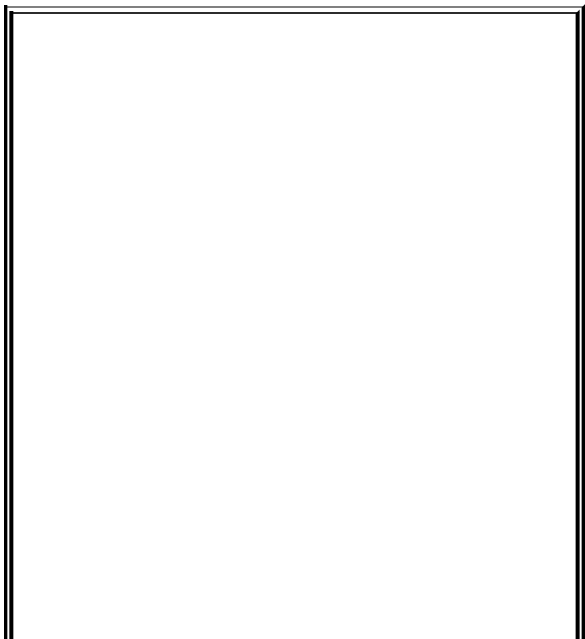
In this chapter, you will learn about

- ✓ [The Internet as a Communications Tool](#)
- ✓ [Roles of Direct Marketing and Relationship Marketing](#)

The primary objective of this chapter is to understand the communication options and marketing techniques that are available to Webmasters. More importantly, this chapter begins to demonstrate how these

communication options can be utilized to facilitate and enhance business communication and marketing using the Internet and World Wide Web to develop successful marketing relationships.

Lab 1.1: The Internet as a Communications Tool



Lab Objectives

After this Lab, you will be able to

- [Evaluate How Your Organization Communicates](#)
- [Evaluate How a Live Web Site Communicates](#)

The World Wide Web is a client-server application that provides a graphical user interface for information presentation and interactive communication. What this means is that we can communicate in almost any

way imaginable over a network of computers. And the computers add previously unprecedented functionality to the situation.

That said, the primary goal in marketing communication is to add value to a product in the eyes of a prospective or current customer. Another way to say this is the fulfillment of wants, needs, and desires. The Web is an exciting opportunity for us as marketers to add value to products and services and fulfill wants, needs, and desires through the use of interactive

information presentations and transaction systems. Over time we can build successful marketing relationships through this process.

These systems can be highly effective for marketing communication. The best systems duplicate successful physical world models. Buying books over the Web just duplicates a highly successful model of direct catalog marketing. All the Web can really do is provide an interface for information retrieval, interaction, and transactions.

But this is a powerful situation for marketers as the Web empowers customers by giving them what they want, how they want it, and when they want it.

But let's not forget that the Internet and Web is a communications tool. It is not a business solution but instead provides communications tools that can facilitate business and interaction. The technology is not the answer. Using the technology effectively provides customers with answers to their questions. And that is what marketing is all about.

Lab 1.1 Exercises

1.1.1 Evaluate How Your Organization Communicates

To begin thinking about the Internet as a communications tool, let's start by answering a few questions about our own communication methods.

When you communicate professionally, how do you communicate?

a)

What is your secondary method?

b)

What kinds of information do you comm

c)

When you are asked a question by a cus
find the answer?

d)

1.1.2 Evaluate How a Live Web Site Communicates

Using a computer connected to the Internet, your first lab assignment in this section is to purchase a book over the Internet. You are a consumer with a want, need, and desire. You want to purchase a book. To do so, follow these steps:

Point your browser to [amazon.com](https://www.amazon.com), an on-line bookseller.

Have you ever visited [amazon.com](https://www.amazon.com) before?

a) _____

Search the Web site for any book you wish. If you need a suggestion, try looking for the book titled "Versed in Country Things."

Which book title did you search for?

b)

Complete the steps necessary to purchase the book until the last possible option to buy is presented. You don't need to purchase a book to complete this lab exercise. But do everything up to the point of purchase, including completing the customer account information requested by the Web site if you haven't done so previously.

Record the steps that are involved and t
place in the purchase of a book over the

c)

Terminate your visit to the on-
line bookseller. Check out the
news at cnn.com.

Lab 1.1 Exercise Answers

1.1.1 Answers

More and more people are using (text-based communications channels) as the perfect channel for marketing and

What is your secondary method?

b) _____

After phones and e-mail, communication for text and graphics.

This includes everything from internal and external marketing materials and pieces of hard copy printed material. Information is available for your company to spend billions of dollars and hours editing, mailing, distributing, filing,

Answer:

The good news is that the growth of the hyperlinked publishing environment

functionality of written material. T
dynamic, and flexible than the cur
information can be distributed at
storage, and can be changed and

What kinds of information do you

c) _____

*Obviously, your answer will vary i
information that this question sho*

On a daily basis I respond to exte
prospective students with market
to my staff and colleagues with d
information. I process two piles o
constantly create new versions o
forms) and marketing materials ir
functioning. I also constantly con
messages and respond to a cons

conversations via e-mail.

Answer: Except for reading my mail, which is in a circular file, almost every one of the things I converted to Internet technology myself, my students, and my staff of this book was accomplished using

Internal operations between departments that could be converted easily. The retrieval I do is accomplished via the Internet. And information from this source. And airline tickets to projection equipment. Though I am a Web proponent, though the business world is moving in a different direction and Web communication tools effective more than developing them as we benefit greatly.

When you are asked a question by find the answer?

d)

Unless you know the answer from somewhere. Hard copy storage of good old-fashioned books. But not databases.

While books and files are static data usually stored in databases for operations can be shared, developed, and modified in fashion and can be compiled and

Answer: When a customer contacts me with I refer to our internal database, with desktop computer. This takes my available to the students directly, which would make them happy. I things and theoretically save money would make me happy.

If I put my internal database on the money and make the students happy

marketers and communicators.

1.1.2 Answers

Point your browser to an on-line bookseller. A popular Web site for this type of commerce is [amazon.com](https://www.amazon.com).

Have you ever visited [amazon.co](https://www.amazon.co)

a) _____

Your answer will vary, but if you think about it from it in the past, your experience is like somebody who has never visited

Answer:

I accessed this Web site via the [a](#) good things about this site but have a local book shop. You will see as well. This Web site is an excellent example of

Search the Web site for any book you wish. If you need a suggestion, try looking for the book titled "Versed in Country Things."

Which book title did you search for?

b) _____

Your answer will vary. Here's min

I searched for a publication of Fro
search field. The Web site returned
pricing, availability, and even a littl
with the lack of tactile interaction
process involved with traditional r

Answer:

Two options were also presented
a traditional on-line shopping cart

Complete the steps necessary
to purchase the book until the
last possible option to buy is
presented. You don't need to
purchase a book to complete
this lab exercise. But do

everything up to the point of purchase, including completing the customer account information requested by the Web site if you haven't done so previously.

Record the steps that are involved in the purchase of a book on the Web.

c)

The following is an account of my experience.

I tried the quick method but was unsuccessful in attempting to change an account to create a new account. If I had

frustrated and abandoned the effort. When I was able to overcome these obstacles, I was able to create an account name and password and provide the necessary information. A confirmation screen appeared, and gave me the opportunity to return back to the home page. But now it was different. I now had a customized username and an option to view my profile.

Setting up an account and purchasing a product were different, linked Web pages. Every transaction involved completing forms to provide personal information. The amount of time

This situation was driven by me, the user. The Web site presentation dictated the sequence of the transaction. The effort was comparable to that of a traditional direct marketing campaign.

Answer:

This is an important distinction in the Web marketing process. As Web marketers, we receive the opportunity to reach a prospective customer to complete a transaction. The Web, however, is that end users are in control and can receive an immediate response.

participate at their leisure.

One of the fundamental goals in V their interactions with us. We ben transactions with computers inste customers benefit by engaging m receiving immediate informational marketing is good news for both

Terminate your visit to the on-line cnn.com.

The purpose of this last step is to amazon.com server.

Lab 1.1 Self-Review Questions

In order to test your progress,

you should be able to answer the following questions:

Which of the following is NOT an example of relationship marketing at the [amazon.com](https://www.amazon.com) Web site?

1. _____ Customized welcome page for repeat visitors

- _____ Discount over retail price of product
- _____ Offering book recommendations
- _____ One-click ordering
- _____ All of these are examples of relationship marketing at [amazon.com](https://www.amazon.com).

Which of the following is the most effective means of communication today?

1. _____ Telephone

2)

- _____ Postal mail
- _____ Electronic mail
- _____ Voice mail

It is not likely that the Internet will ever become a primary source of marketing and/or communication.

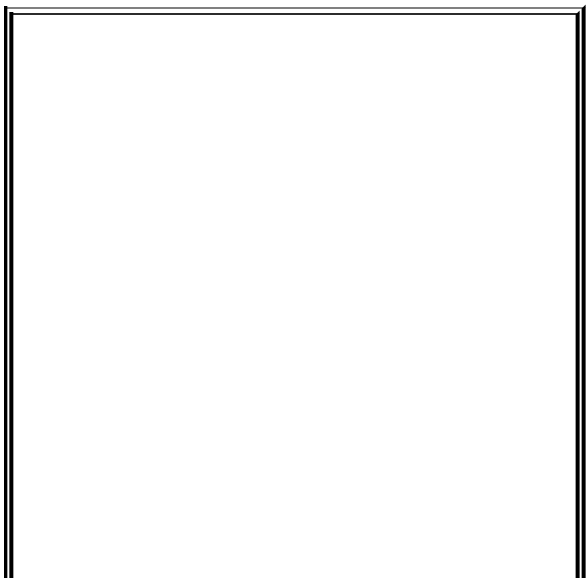
3)

1. _____ True

- _____ False

Quiz answers appear in
[Appendix A, Section 1.1](#).

Lab 1.2: Roles of Direct Marketing and Relationship Marketing



Lab Objectives

After this Lab, you will be able to

- [Understand the Roles of Direct Marketing and Relationship Marketing](#)
- [Understand the Concept of Customization](#)
- [Understand the Simple Mechanics of Internet Marketing](#)
- [Identify and Evaluate Your Favorite Web Site](#)

Let's take a look at the traditional definitions of direct

marketing and its latest incarnation, relationship marketing. The Internet provides exciting marketing communication opportunities using these methods to customize presentations and exchange information with end users. Looking at our favorite Web sites also demonstrates the direct communication methods that the Internet supplies.

We usually think of direct marketing as junk mail and dinner-time telemarketing efforts, but the methods are

much more in depth than we may realize. Simply put, direct marketing involves direct sales to a buyer by a seller. More important, direct marketing generally involves at least five distinct elements in any program or effort:

- Promotional materials
- Databases
- Analysis
- Marketing with offers (response driven)

- Fulfillment

Promotional materials carry the marketing message to the end user. They may be mail packages, catalogs, phone scripts, fax letters, postcards, or e-mail messages. Any material, from four-color glossy to spoken words and even television infomercials, can be considered the promotional materials of a direct marketing effort. These materials are then delivered to the prospect or customer using some method. The script being read by the

telemarketer at the other end of the phone during dinner is an example of direct marketing promotional material. The method of delivery in this case is outbound telemarketing.

Databases are electronic information storage and manipulation files. They are used at a basic level to provide contact information for the promotional materials to be forwarded to. A simple list of addresses for a mailing or names and phone numbers for a telemarketing effort can be considered a direct marketing

database. Real direct marketers, however, use databases over time to create contact, prospect, and customer files for ongoing business development and customer service efforts. Every communication to and from a prospective or current customer is recorded. This is why modern direct marketing is sometimes called database marketing. The telemarketer called you during dinner because you are included in a database of information. Your contact information was

probably purchased from a database company that specializes in consumer home contact information.

Direct marketers analyze database information before, during, and after each program they run to better use resources and further target offerings to prospects and customers. This is how direct marketing is developed and how it is measured. Using the telemarketing example, you are being called because you have demonstrated your willingness to do whatever the

telemarketer is asking you to do. You may be a well-qualified prospect. Being a responsible credit card customer is one reason you get called during dinner with offers for more credit cards.

Whatever the reason you are contacted, that reason was determined by a direct marketer. And you were chosen to receive that call through analysis of a database. If you do speak with the telemarketer and sign up for the credit card, then you have advanced from qualified prospect to customer.

Later, when the program is analyzed for success, the costs to run the program and the number of new customers can be compared and evaluated. Though those telemarketing calls may seem random, and sometimes they are, a company is paying for the call and the caller. A company can't afford to call every person who has a phone. You are being called because a database was analyzed at some level and your name and contact was provided as a prospective customer.

That call almost always involves an offer. And an offer is included in direct marketing communication to solicit and motivate response. Response is a communication action taken by the recipient of the offer. Offers work on the age-old psychological principle of "What's in it for me?" Offers can be anything included in a marketing message that sweetens the deal enough to solicit response. They might be free gifts, special pricing, time-sensitive discounts, and standing offers like money-back

guarantees and risk-free trials. Direct marketing always contains some form of call-to-action that can be responded to. In the telemarketing call, the offer is usually a discounted finance charge and an introductory interest rate. You may have been offered a special credit card carrying a particular set of benefits important to you based on some type of affinity, like an alumni association or frequent flyer program. This offer was developed based on deeper analysis of your contact or

customer database file. The response is verbal during the call.

Once a response is captured by a direct marketer, some type of fulfillment is executed. If a product is purchased directly from a catalog, then fulfillment involves charging the customer's credit card account and shipping the appropriate product to the correct address. A request for information is fulfilled in the appropriate manner. A credit card account is created and opened and the cards are shipped to the new

customer. A record of this transaction is recorded in the direct marketing database for analysis and later use.

Use of these methods over time is now defined as relationship marketing. In a relationship marketing model, every communication between the customer and marketer is recorded in the database. And every department in a company has access to that same information, from sales to customer service to shipping and accounts receivable. In this type of marketing every person

or department that has contact with the customer shares the same information. This creates a higher level of customer service, satisfaction, and efficiency in every interaction with the customer. Greater use and sharing of information helps companies build and keep relationships with their individual customers.

As this information is captured and analyzed, special offers are being developed that are specifically targeted to the individual based on his or her demonstrated needs and

buying history. This process builds a relationship between buyer and seller. Buyers get what they want, when they want it. Sellers deliver what is wanted at the right time. Both participants are engaged in a positive commercial relationship.

This customization is very successful in the marketplace, and it has been said that all marketing will eventually become direct relationship marketing between individuals and companies. Customization of marketing messages involves

traditional elements, like personalization of promotional materials. But more important, it includes offers of products and services specifically designed to meet the wants, needs, and desires of the customer involved. These offers can be delivered in a customized presentation using personalization and targeted solicitation.

The Internet and Web are excellent communications methods for all of these aspects of direct and relationship marketing. The dynamic aspect

of this media also makes individual customization of presentations available and powerful. Using the Internet as a relationship marketing tool incorporates the five elements of direct marketing to build relationships over time and deliver customized presentations and marketing messages to individual users.

Promotional materials. The Web can be used as an interactive promotional medium displaying text, graphics, and any other

media available that is practical for communicating to prospects and customers. E-mail can serve the same role as traditional mail and phone communication. It could be said that every Web site is promoting something to some audience.

Databases. The nature of this medium, based on computer technology, provides the marketer

with immediate interactions between users and databases of information. Information can be captured and manipulated instantaneously and utilized to provide solutions to wants, needs, and desires. A perfect example is the availability of Federal Express package tracking on the Web.

Analysis. Again this can be done immediately to

provide value for the end user. Information can also be captured for later review, reporting, and improved targeting of information. This process is done automatically and behind the scenes of a Web site.

Marketing with offers (response driven).

Successful Internet marketing involves the use of targeted offers. In any situation on the Web special offers can be made

to solicit immediate response. And the Web provides an immediate, interactive response device that can capture and exchange information instantly. Offers can be individual for particular customers or specific products or services, such as special discounts for certain airline tickets purchased on-line. They can be available only on the Web or otherwise. Many heavily discounted airline offers can't be

purchased any other way. Some offers in traditional media can be further strengthened by adding a Web response option. A recent mailing offered frequent flyer miles for completing an airline survey. The number of miles awarded was increased if the survey was completed on the Web.

Fulfillment. In some situations, including software, information

products, and services like on-line trading transactions, fulfillment can be completed immediately over the Internet. Many research reports and software tools can be downloaded immediately after purchase. Internet stock trading is another example. Other products and services require fulfillment through traditional channels, including shipping of Web-based catalog purchases.

But parts of the process can be automated using the Web. Credit card processing can be facilitated and fulfillment information can be supplied to the customer. Order status (i.e., processing or back order) can be displayed on demand and an e-mail message can be sent when a package has been shipped.

As all of these processes are completed over time, an individual profile of each

customer and his or her interactions over the Internet can be compiled. This information can be made available internally, inside the company, using a Web interface for facilitation of customer interactions. It can be added to existing customer databases and used in other media as well.

Most important, these compiled information profiles can be used to create customized presentations for each customer, further enhancing the customer/marketer

relationship. As the profile grows, with more information added during each interaction, the marketer can build customized interfaces and offers that are specifically targeted to the customer. We'll look at examples of this activity in the following exercises.

We'll also start looking at the simple mechanics of the information exchanges that can take place over the Web. Information is solicited by marketers and supplied by the end user. Information captured by the marketer can then be

used to build marketing relationships and fulfill wants, needs, and desires.

Some of these concepts also become apparent when we look at our personal favorites on the World Wide Web. Our favorite Web sites usually supply something we want either information, products, or services. Looking at these sites helps us to start thinking about targeting Web presentations to audiences. And that is the subject of the next chapter.

Lab 1.2 Exercises

1.2.1 Understand the Roles of Direct Marketing and Relationship Marketing

Identify an example of direct marketing |

a) _____

Define the elements that make up direct

b) _____

Describe an ongoing business relationship

c) _____

Try to define relationship marketing as a

d) _____

1.2.2 Understand the Concept of

Customization

This exercise involves returning to the [amazon.com](https://www.amazon.com) Web site that you visited in [Exercise 1.1.2](#). If you didn't actually leave, please do so at this time. You're now returning as a customer.

Point your browser back to www.amazon.com.

What do you notice that is different from

a) _____

A number of suggestions will be made by the Web site for additional titles you may want to check out. Do so.

Record what you notice from a marketing

b)

What other elements of the Web site present a customer?

c)

How does this affect you emotionally as return here again to complete the same

d)

1.2.3 Understand the Simple Mechanics of Internet Marketing

Thinking about the whole book buying experience, please complete the following questions:

What information was supplied by the W

a) _____

What information did the Web site captu

b) _____

How was the information used by the W
second visit?

c) _____

What types of Internet communications

transactions?

d)

1.2.4 Identify and Evaluate Your Favorite Web Site

Referring back to your Internet-connected computer, this next lab exercise is probably simplified by the use of your bookmark file in your Web browser.

Point your Web browser to your favorite Web site.

What is it and why is it your favorite Web

a) _____

What information do you regularly retrieve

b) _____

If this Web site is not bookmarked by your browser, do so now. We'll be referring to

it again.

Lab 1.2 Exercise Answers

1.2.1 Answers

Identify an example of direct marketing.

a) _____

Almost every piece of mail you receive is an example of direct marketing.

Answer: For discussion purposes, let's talk

company. L.L. Bean is a consume

Define the elements that make up

b)

Most people recognize the basics communication between marketers and customers. Direct marketing, which involves physical contact between the marketer and the customer, involves a personal conduit between the marketer and the customer. Looking at traditional direct marketing.

The definable elements of direct marketing are: databases, analysis, marketing with databases, and distribution. Direct marketing distributes a variety of four-color brochures and catalogs. Direct marketing database techniques to develop a mailing list of these catalogs. Analysis of the people at L.L. Bean leads to find appropriate audiences. If I purcha

Answer: equipment catalog. If I purchase from the housewares catalog based on an

The long-time offer from L.L. Bean. If you buy something from them for replacement or for the money you spent on a broken pair of sunglasses years ago, the sunglasses were selling for what they worked for L.L. Bean because purchasing from L.L. Bean also offers discounts, special offers. Fulfillment of catalog requests is efficient. The goods is equally professional. L.L. Bean is a company. We can learn much from their techniques and how they can be applied to communication.

Describe an ongoing business relationship.

c) _____

Your answers will vary. Following

Many of my own business relationship experiences. I get something I need worth my while to keep the business gasoline. I regularly purchase Mobil payment system that is very convenient program that gives me discounted amount of gasoline. In addition to service and something additional to keep the relationship going.

Answer: My business relationships are similar direct marketing of the Merrimack purchasing a new list from a broker work. In addition to providing a good delivering it in an efficient manner, a personal relationship. Who do you need a list?

I use the same mail house because good job and provides excellent customer to complete projects. These situations beyond the traditional buyer and seller.

enhance traditional marketing mo

Try to define relationship marketin

d)

Relationship marketing is an advance previously discussed elements. They involve capturing, analyzing, and between all parties within a company every single customer communication process further involves developing customer service programs for information.

Let's look again at the L.L. Bean e some new flannel pajamas for a customer history. The representative bought last year, the gift recipient method of payment, and shipping

Answer:

suggest products based on previous purchases. This simplifies the buying process between us. If I call with a question, the system knows all the same information. That's a win-win well.

This type of marketing communication is called targeted marketing. Web also provides further enhancement to the marketing process and benefit from the communication.

1.2.2 Answers

Point your browser back to the same Web site you just visited.

What do you notice that is different?

a)

The following summarizes my ac

Answer:

Upon return, I now have a custom merchant. The merchant is now b relationship marketing is the key t business environment.

A number of suggestions will be made by the Web site for additional titles you may want to check out. Do so.

Record what you notice from a m

b)

c)

*After completing the account setu
stored and brought up when nece*

Answer: *system is extremely easy to use,
When an end user wants to purch
simple and immediately gratifying*

How does this affect you emotion
return here again to complete the

d)

*While I can probably safely assur
did, your answer here will obvious*

Answer:

I greatly enjoyed this on-line book when planning to purchase books my wants, needs and desires. The money, adds value to the product I still enjoy retail shopping at book merchant. But if I have an in marketing effort will garner my bu

1.2.3 Answers

Let's take a look at the mechanics behind this type of marketing communication.

What information was supplied by

a)

Answer:

The Web site supplied a whole range of products and driving transactions was text and was supported by pictures and representation.

What information did the Web site capture?

b)

The Web site captured contact, sales, and a secure, encrypted connection. Referred to using a number of forms and drill down to electronically coded my client browser hard drive.

Answer:

This software transaction individual marketer's server to present customer

logs on. A cookie is actually a small file stored on the user's computer by the server computer. The cookie is a small file that is computer discernable by the server. The cookie is an electronic identity badge also provided to the user by the client over time and helps build re

How was the information used by the user on their second visit?

c)

When I filled out the initial account information, the system customized by presentation and provided me with the recommendation process. When I returned to the site, the cookie file, accessed my customized pages with the appropriate custom

Answer:

What types of Internet communications are considered transactions?

d)

The technology involved in these server based applications available Web servers and client browsers , interactively between parties. E-r purchase transactions.

The power behind the scenes control the storage, searching, and customer Web pages produced and support customer information to complete interactions.

Answer:

In this situation and others on the customers and other end users to from databased information. They situations where they have control immediate positive response. In a are more cost effective and more communications channels. Database

achievable goal for any Web mark

1.2.4 Answers

Point your Web browser to your favorite Web site.

What is it and why is it your favor

a) _____

Your answer will vary.

I consider the Cable News Netwo

site. I originally studied journalism
a news junkie. I like to know what's
business sector. I also like the space
available on that site. Most important
available based on my hometown
involves a personal interest.

What information do you regularly

b) _____

Again, your answer here will vary.

I do a lot of outdoor stuff when I
forecast is helpful in the inconsistent
This is quite useful for me personally
times a week. I'll bet that you access

Answer: some type of information you either

I have this resource bookmarked

current weather conditions and a
me happy, and I don't mind taking
I value highly. Marketers and com
using the Web as a communicatio

Lab 1.2 Self-Review Questions

In order to test your progress,
you should be able to answer
the following questions:

Which are technologies used in creating
customer relationships at
[amazon.com](https://www.amazon.com)?

1. _____ Client-server

information exchange

- _____ Writing and reading cookie files
- _____ Databases of customer and product information
- _____ Customized Web pages created for each customer interaction
- _____ All of these are utilized.

Which are the elements of direct and relationship marketing?

1. _____ **Promotional materials**

- _____ Offers, response devices, and fulfillment

- _____ Databases and analysis of information
- _____ Sales calls and branding campaigns

Which is the reason you access a particular Web site regularly?

3) 1. _____ **Because it provides information I want easily and quickly**

- _____ Because it has cool graphics and lots of banner ads for products I want

Quiz answers appear in
[Appendix A, Section 1.2.](#)

Chapter 1: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

Evaluate your current marketing

1) efforts. How do you currently fulfill wants, needs, and desires?

Identify any direct and relationship marketing activities. Do you build

2) relationships with customers through information capture and targeted communication?

Look for opportunities to develop database interfaces that will develop and sustain Web marketing

3) relationships. Where can the use of this technology increase customer satisfaction while decreasing operational activity?

Chapter 2. Internet Marketing: Planning, Targeting, and Evolving



Are we there yet?

backseat child (or adult)

Chapter Objectives

In this chapter, you will learn about

✓ The Importance of Planning an Internet Marketing Effort

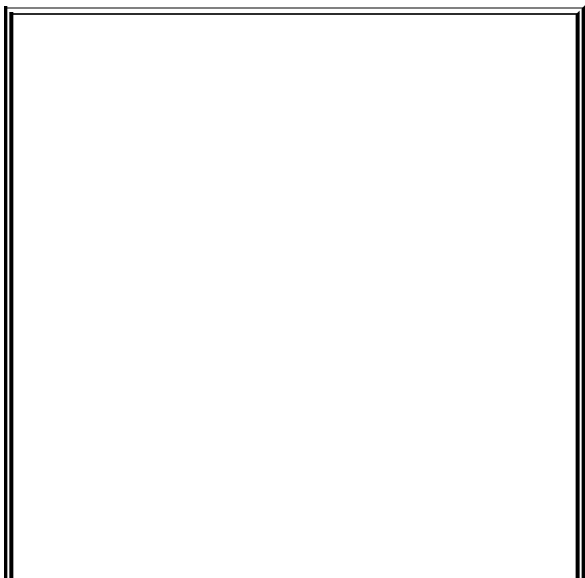
✓ Defining Audiences and Targeting Information on the Web

✓ The Evolution of Internet Marketing Efforts

The objectives of this chapter are to understand the planning of an Internet marketing effort. This chapter stresses the importance of planning in any marketing program to facilitate

initial development and later measurement. A model using the five W's of journalism writing is utilized for planning purposes. Defining the audience in Internet marketing is both explained and demonstrated. The evolution of Internet marketing efforts is also introduced to describe and facilitate the planning process.

Lab 2.1: The Importance of Planning an Internet Marketing Effort



Lab Objectives

After this Lab, you will be able to

- Understand Why Planning Is Important in Web Communication
- Utilize the Five Ws and One Big H of Web Communication

The simple truth of Web communication and marketing is that any information can be communicated to anybody with Internet access at any time. This is good for Web marketers but requires a serious planning

effort before any actual Web development work is begun. Of course, this is not the case in most situations. Many Web sites are thrown together with little or no previous planning, and then Web developers are held responsible for the enormous expense and minimal results.

Whether you are starting from scratch or revamping a Web effort already under way, it is never too late to make a plan for your Web communication efforts. Why do this? For two very significant reasons:

1. Without some type of plan, it is virtually impossible to measure the progress, success, or failure of a Web effort.

- A lot of options are available in Web communication.

Without some type of plan in place regarding our Web marketing and communication efforts, we have no way to benchmark where we stand at any given point. Unless we are working for ourselves, we will probably be held accountable

for a budget and how money is spent on Web communication. A plan helps justify and explain how money is used and the communication it funds.

A plan also gives us a course of action. Because of the technical nature of Web communication, it is very easy to get involved in technology usage issues while losing sight of an overall objective. Technology for technology's sake is a reoccurring problem in the marketplace. As Web communicators, we need to drive Web development efforts toward a

communications goal. And to do so we must come up with a goal or series of goals in the first place.

Keep in mind that we are not talking about project management issues in this chapter. Those issues are covered elsewhere in this book. Instead we are talking about examining all of the communication options available to us and then developing a communications plan to execute and measure against.

To discuss this concept, I'd like to utilize the traditional journalism model of who, what, where, when, why, and how. This is a formula used by generations of writers to develop news reports. We can also use it to begin planning Internet marketing and communication efforts. In this discussion,

Who defines the audience.

What defines the information exchange taking place with each

audience.

Where defines the physical location of the audience members, which may or may not be important.

When describes the time issues involved with the information exchange.

Why describes the planned outcome of the exchange.

How defines the structure and Internet

communication applications being used to communicate to the audience.

The first term, *who*, is probably the most important aspect of such a plan. Since every user of the Internet is a potential audience member, this question must be determined first and foremost. Who are we planning to communicate with? The answer to this question can be defined as an audience, a group of users we wish to communicate with. A myriad of

potential audiences exist on the Internet, but here are some likely groups for our efforts:

- *Current customers.* People or companies you regularly do business with using other media to communicate. A relationship already exists.
- *New customers.* People or businesses you didn't do business with before using other media but wish to now using the Internet. This is a new opportunity to

build a relationship.

- *A variety of customers from different products or lines.*
Some companies sell a variety of products to the same customers; an example could be an office supply company that specializes in products for the legal industry.
- *A variety of customers from different vertical industries or a horizontal market.*
Some companies provide the same solutions to a

number of vertical markets. An example is a PC maker who sells to all businesses, regardless of industry.

- *Offer respondents generated in other media.* Users who are coming to a Web site to respond to an offer made in a radio spot, direct mail piece, or space advertisement.
- *Offer respondents generated on the Internet.* These users are probably linked to your site

somehow from another location. Maybe a search engine, banner advertisement, or another Web site that you have a relationship with was the initiator of the communication.

- *Shareholders in public companies.* Any users owning stock may want to access the Web site belonging to their investment.
- *Internal employees.* An

intranet is designed for use by employees of a company.

- *External employees, vendors, and partners.* An extranet or private Web site is developed for these audiences.
- *International markets and consumers.* Any company or organization on the Web becomes an international player since the Internet is available worldwide.

What is the next question we must answer in an Internet marketing and communication plan. Each of the audiences listed previously will require a different information presentation and exchange effort. For example,

- Current customers are familiar with your company and need updated pricing or technical information and an on-line transaction system to order more efficiently. Maybe they need order status

information for orders placed in other channels or a way to change their contact information.

- New customers may be looking for products they can't find in traditional channels, like specialty foods or goods, or maybe they are looking for a more convenient way to purchase products, like at [amazon.com](https://www.amazon.com).
- A variety of customers from different products or lines.

In this situation an on-line catalog of office supply products would be presented for a specific audience of office managers and supply buyers in this industry. Transaction and information exchange systems would be geared toward the needs of this particular audience.

- A variety of customers from different products or lines. In this situation a PC maker may want to present different products and

pricing for different vertical markets, like specific education, consumer, and business presentations, and then use a universal transaction system for all users if it is possible to do so.

- Offer respondents generated in other media. These people are looking for whatever your offer promised and are so motivated by the offer that they have initiated communication to your

Internet marketing effort. They require immediate fulfillment of wants, needs, and desires. These respondents are self-qualifying themselves based on your offer.

- Offer respondents generated on the Internet are the same as those generated in other media but slightly less self-qualified as they know they can always hit the back button on their browser if your offer does not meet

their needs. Some users following a link may be highly interested in your offer as well.

- Shareholders in public companies may be looking for current stock prices or more detailed financial or annual reports.
- Internal employees will have a number of information needs that are very different from those of customers or prospects, including human resources,

benefits, product training, operations information, and contact information.

- External employees, vendors, and partners may be looking to continue existing relations and information exchanges using the Internet as the communication channel.
- International markets and consumers may be seeking information about products or pricing that are not available in their location.

All or some of these different information presentations may need to be included in a comprehensive Internet communication effort. Each audience requires a different approach, but all can and should be served.

Where is a relatively easy question to answer in this process. In front of some type of computer terminal with access to the Internet, World Wide Web, and e-mail service is where this communication will take place. Geography is not important for many Internet-

based communication efforts.

However, in some situations where that communication takes place might be an issue to consider. Delivery of products and services may not be available in some areas. Shipping of products may be priced based on geography. Employees working on a manufacturing floor may not have Internet access at work but can be encouraged and assisted in home access. Doing business with international customers brings in a whole series of issues, including

currency, export laws, and shipping.

When is another easy answer with a big catch. The Internet is available all the time, seven days a week. That means a Web site can be accessed "24/7," to use a familiar buzzword. But if your audience requires individual, person-to-person interaction, that might mean a shift in business operations to a 24-hour cycle. If an e-mail message sent in by a customer or prospect won't be answered until the next business day, then that day

must be defined for the Internet audience.

The same is true for any type of fulfillment on or off the Web. Due to the instantaneous nature of Internet communication, users expect fast results. Your company or organization must define its ability to fulfil information, products, and services and then execute that fulfillment as promised. If you commit to shipping a personalized product within 24 hours of the time the order was received, then that should happen. If it isn't

possible to do so, then it is better to change the fulfillment schedules than not deliver as promised. A broken commitment is no way to begin or continue a business relationship.

Why this interaction is taking place has probably been discussed in the answer to the *what* question. But a planned outcome for each information exchange with the appropriate audience member helps further define the plan for development and measurement of an Internet marketing effort.

This *why* answer can be a benchmark for Web site activity. If the planned outcome is a sale to a new customer or an information exchange with an employee, then a later comparison of actual sales versus new Web site visitors or measurement of information fulfillment is an excellent tool for analysis.

The answer to the *why* question also helps further develop a plan for the next question: *How* do we communicate using the variety of options available on the

Internet? The answer to this question will probably involve a variety of technology options and information interface decisions.

Traditional marketing materials used text, graphics, and multimedia to identify, explain, display, and demonstrate products and services. The Internet provides opportunities to duplicate such efforts on the Web. The Web also provides opportunities to capture information using forms processors embedded into Web pages. If each user requires

individual confirmation of an order or an answer to a specific question, then e-mail can probably be used. E-mail can also be used to replace relationship-continuing efforts like hard copy mailings and regular phone calls.

If your audience needs access to a database of information, then a Web-based database interface must be designed with the specific needs of each audience participant in mind. A complete sales cycle must be envisioned first and then an interface must be developed

that accomplishes the goal of the interaction. The [amazon.com](https://www.amazon.com) Web site is an example of a interface designed to sell products and uses databases behind the scenes to deliver, capture, and exchange information with the user. The whole interaction is designed to facilitate the purchase and fulfillment of products.

Lab 2.1 Exercises

2.1.1 The Importance

of Planning

To understand the importance of planning in Internet marketing, let's use a hypothetical example from the physical world. Let's assume for the sake of discussion that you have been instructed by a supervisor to communicate face to face with the five biggest customers your hypothetical company has, asking each what their projected growth is for next year. Let's assume you have to complete this task in

five days. You have to travel out of state to do so, and your company requires preauthorization for travel money. Your supervisor wants daily updates on your communication and how you spend travel money.

Using the five Ws, what is the first quest to complete this assignment?

a)

What is your next step in going to see th

b)

On the third day the supervisor calls you and asks how much money you have spent and whom you have contacted. Using the information given in (a) and (b), what do you think the supervisor will do?

c)

Upon return to the home office you must submit a report of expenses compared to the original authorized amount. What cost for this type of activity in the future do you think will be most likely to occur?

d)

2.1.2 Utilize the Five

Ws and One Big H in Web Communication

Let's now examine some basic planning ideas by reverse engineering a successful Web site. Using a computer connected to the Internet, return to the [amazon.com](https://www.amazon.com) Web site that you visited earlier. We won't know the exact answers to these questions, but we can make some general assumptions to address these concepts.

Who are some of the audiences this Wel

a) _____

What information is planned to be excha
audiences?

b) _____

Where are these interactions taking plac

c) _____

Does physical location play any role in th

d) _____

Does the concept of *when* apply on this

e)

Why are these interactions taking place?

f)

How are these interactions taking place

g)

Lab 2.1 Exercise Answers

2.1.1 Answers

Using the five Ws, what is the first step to complete this assignment?

a)

Your answers may vary, but you need to speak to.

You have a general understanding of the need to communicate with the five who they are. A quick check on social media, hopefully, the contact information

Answer:

This is the first step in developing audience. You already know what why and how of the situation. You know the customer's plans for ne personally to complete this intera

What is your next step in going to

b)

Again, this is a broad question, but of a plan to travel to and commute requires preauthorization in this h arrangements in advance.

Regardless of the need for preaut advance and create an itinerary th issues involved with the trip. In th people. Plane tickets and hotel ro reserved in advance to save mon

Answer: airport transit and dining choices, many of the larger details are planned. A budget must be budgeted for these activities.

Overall, this effort requires an act of 5 days and need to visit five people. You will visit one each day. A plan will be created to make sure you get to each place you determine costs in advance and then visit an airport.

On the third day the supervisor can determine how much money you have spent and the information given in (a) and (b), visit

c)

Answers will vary, but based on the information given by the supervisor that you have visited visit

*state your conclusions based on y
have actually spent, and your pla*

Answer:

This demonstrates why planning is
Planning gives us an opportunity to
expenses based on these measur
report actual results and accurate
requested. It is the same in Interr
of action, a record of interactions
opportunity to measure the perfo
and expenses.

Upon return to the home office yo
expenses compared to the origina
cost for this type of activity in the

d)

*To complete this action you would
them to your budgeted amounts.*

develop an average cost for this t

While this activity seems quite simple, it has established a benchmark for a basic analysis that can be used for the allocation of resources. Though there is more with travel logistics than cost, the importance of planning.

Quite simply, without planning we don't know how much it will cost. Planning gives us a way to find out at any given time, what it costs to do something in the same context.

2.1.2 Answers

Let's now examine some basic planning ideas by reverse

engineering a successful Web site. Using a computer connected to the Internet, return to the [amazon.com](https://www.amazon.com) Web site that you visited earlier. We won't know the exact answers to this question, but we can make some general assumptions to demonstrate these planning concepts.

Who are some of the audiences t

a) _____

Your answers will vary but could i

variety of customers from a horizontal audience, meaning almost anyone interested in directly purchasing the product demonstrated a desire to do so using the product. Both current and new customers and prospects could be responding to

What information is planned to be shared with the target audiences?

b)

We discussed this in the previous question include: product information, special offers based on particular customer segments, the business transactions available, contact, payment, product preferences, and other information, which is all captured

Answer: It is important to note that this information is

traditional media component. The Internet communication model, w importance of planning in such eff Internet marketers are used on th to see all the types of informatior

Where are these interactions taki

c) _____

Again your actual answers will va

Answer: *interactions are taking place on th
home or work via some kind of ne*

Does physical location play any rc

d) _____

The physical location doesn't necessarily determine the transaction but it does affect the transaction

Physical location is very important in determining the pricing structure for shipping costs.

Another aspect of where this exclusion relationship with the computer the customization aspects of the Web identify the client computer with the using the computer shares that site in turn access the site, then that computer

Answer:

In this situation the *where* and *when* exists for this issue, but the [amazon](#) on cookie ID processes and instead to identify customers.

Does the concept of *when* apply to

e)

This marketing activity and the in at all times, 24 hours a day, and important for fulfillment activities

Answer: Again, this involves shipping time cost of that shipping. Express delivery transportation. International delivery telephone-based communication effort, so this communications ch

Why are these interactions taking

f)

These interactions are taking place and other materials using an on-l

Answer:

Though information gathering is a marketing effort has been put together entire effort was planned and produced goods. The Web site is similar to a media.

How are these interactions taking

g)

Internet technologies being utilized supported by back-end database communication.

A lot of information is being exchanged being used is the same available to site is dynamic because almost all user are created from databased interactions between users and site via forms, and the information an

retrieval from the databases when
automatically when transactions are
technology.

Answer:

Though we don't know the exact
assume that this whole effort was
using these types of definitions. That
when developing any Internet ma

Planning is generally a common-sense
same common sense is sometimes
technology-based business. This can
expensive mistakes. A better practice
when, why, and how of our company
developing an Internet marketing
plan also helps us set a course of
measurement and expense.

Lab 2.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

Which are two reasons to develop an Internet marketing plan before beginning any effort?

1. _____ The large number of options available to Web marketers

- _____ The extended time frames involved with these types of projects
- 1) ● _____ The inability for this type of communication to change later
- _____ The need for benchmarks in measuring success

- _____ The knowledge that Web sites are always successful

What are the five Ws and one H we should consider when planning a Web communication effort?

1.



2)



Planning is always considered first in

Web communication development.

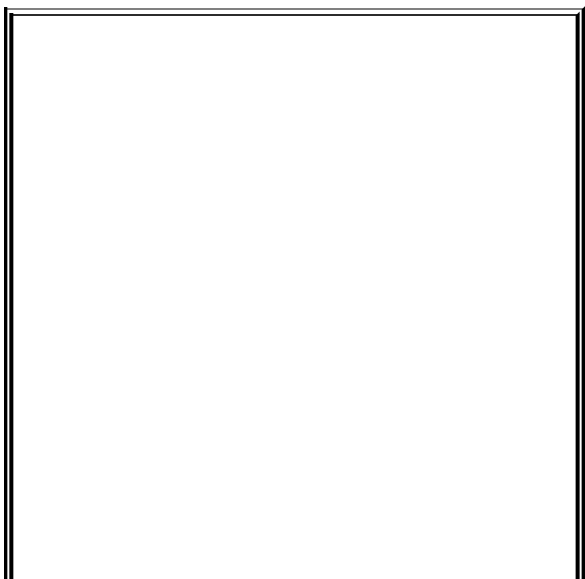
3)

1. _____ True

- _____ False

Quiz answers appear in
[Appendix A, Section 2.1.](#)

Lab 2.2: Defining Audiences and Targeting Information on the Web



Lab objectives

After this Lab, you will be able to

- [Understand the Concept of Defining an Audience](#)
- [Understand the Targeting of Your Favorite Web Site](#)
- [Understand How Targeting is Used on the Web](#)

Let's take a look at some traditional communication methods to learn more about defining and targeting. These are important steps in any type

of communication and vitally important on the Internet because any person accessing the network is a potential audience member.

Internet users must initiate the communication activity by visiting our Web site and joining our communication efforts. In a way we are in a receptive position in this type of communication, and the only way we can initiate it is to attract customers or other interested parties. The end users can and will choose to communicate based on their

needs. Our strongest method in this process is the development of engaging content for the end user.

But to do so we must first know who it is we wish to communicate with. Defining our prospective audience involves looking at our current customers, if possible, and determining why they are our customers and how and what we communicate with them now. If we don't have a current communication model, we can develop a model for the end user we wish to engage.

Deciding who we wish to communicate with is vital on the Internet.

Once we know who we are trying to interact with, we can then determine what we are trying to communicate about. Then we can target information and presentations in an appropriate manner. If we are trying to sell a particular product to a known audience, then we can build a Web site that provides the information and transaction systems to do so. If we know our audience is looking for detailed

information, we can supply it.

This is true in any media, not just the Internet. The first question a writer, speaker, or producer asks is, "Who is the audience?" Everything else is based on this answer.

Successful marketing and communication efforts are targeted at specific audiences. Television advertising campaigns are excellent examples, though these are general and very stereotypical. Daytime television shows carry ads for domestic products targeted at homemakers.

Children's cartoon shows carry advertising for toys targeted at children. Sports programs generally carry ads for tools and trucks targeted at the generally male audiences of these programs. Television ads are very expensive to produce and distribute, so they must be used in appropriate media channels to justify their use. They are targeted at specific audiences by the programming they are run with.

Our favorite Web sites contain information and other presentations that are valuable

to us for some reason. They engage us with their content and provide something that keeps us returning to their addresses. These Web sites have been targeted to specific audiences of which we are members.

On the Internet we must target information presentations to the audience we wish to reach. Doing so will attract and sustain communication with these audience members. With so many choices for communication available to the end user, it is very important

that our Web sites and other efforts provide the information the audience is looking for. Serving the needs of the targeted audience is a primary goal in Internet communication and will result in positive communication for all parties.

Lab 2.2 Exercises

2.2.1 Understand the Concept of Defining an Audience

For discussion purposes, let's do another hypothetical exercise. Let's assume you have been given another assignment. This time you are asked to create and deliver a very short presentation about the favorite hobby of an unspecified audience. You are to give this talk at the end of the week, at an undisclosed location, using verbal communication and audiovisual technology support. You are doing this because this exercise asks you to. Using this information, answer the

following three questions:

- a) Identify the subject matter of your talk.
- b) Define three different topics or subjects you wish to cover.
- c) What is the single biggest question still unanswered at this point?

2.2.2 Understand the Targeting of Your Favorite Web Site

This exercise will help demonstrate the way information and presentations are targeted toward you on the Web. Answer the following questions:

a) Referring back to the previous chapter, what is your favorite Web site?

b) Why is it your favorite site?

c) What audience are you a member of if this site is your favorite?

How is this site specifically targeted at you? What information exchange is

d) available that serves you as an audience member?

2.2.3 Understand How Targeting is Used on the Web

This exercise involves visiting a number of Web sites and investigating the ways they are targeted to specific audiences.

Point your browser to these Web site addresses and answer

the same three questions in a general way for each of them.

1. **www.stopandshop.com**

Q1: What audience is targeted by this site?

How is this site
Q2: specifically targeted at this audience?

What information
Q3: exchange is available that serves this

audience?

- www.more.com

Q1: What audience is targeted by this site?

Q2: How is this site specifically targeted at this audience?

Q3: What information exchange is available that serves this audience?

- www.nasdaq.com

What audience is targeted by this site?

Q1:

How is this site specifically targeted at this audience?

Q2:

What information exchange is available that serves this audience?

Q3:

● www.firsttrade.com

What audience is targeted by this site?

Q1:

How is this site specifically targeted at this audience?

Q2:

What information exchange is available that serves this audience?

Q3:

- www.altavista.com

What audience is targeted by this site?

Q1:

How is this site specifically targeted at this audience?

Q2:

What information exchange is available that serves this audience?

Q3:

- www.artcom.com

Q1: What audience is targeted by this site?

Q2: How is this site specifically targeted at this audience?

Q3: What information exchange is available that serves this audience?

Lab 2.2 Exercise Answers

2.2.1 Answers

For discussion purposes, let's

do another hypothetical exercise. Let's assume you have been given another assignment. This time you are asked to create and deliver a very short presentation about the favorite hobby of an unspecified audience. You are to give this talk at the end of the week, at an undisclosed location, using verbal communication and audiovisual technology support. You are doing this because this exercise asks you to. Using this information, answer the following three questions:

- a)** Identify the subject matter of your talk.

Your answer will depend on the interests of the audience involved.

Answer: Without knowing who the audience is that we are supposed to address, we cannot proceed with this assignment.

- b)** Define three different topics or subjects you wish to cover.

Your answer will again depend on the interests of the audience involved.

Once we know the audience in

Answer: this situation, we can define the favorite hobbies of its membership. Only then can the different topics of subjects for the presentation be determined.

What is the single biggest
c) question still unanswered at this point?

Looking at the information that is supplied initially, the biggest question yet unanswered is the audience for this talk (the who).

If I were to give this talk to a group of school children, the presentation would be very different from that for a senior citizens organization. The what is fully dependent on the who.

And I must know the who to determine the what. The where, when, why, and how can be used with any audience. The audiovisual equipment could be the same, the undisclosed location would not matter, and the time frame could stay the same.

Answer:

But the audience plays a vital role in the situation. Without knowing the audience I have no idea what content or subject matter to include in my presentation. The presentation must be targeted to its audience.

The same is true for Web communication. The flexibility of the communications medium and the massive variety of information available on the Web

mean that a successful presentation must be specifically targeted to the audience it is meant to serve.

2.2.2 Answers

This exercise will help demonstrate the way information and presentations are targeted toward you on the Web. Answer the following questions:

Referring back to the previous

a) chapter, what is your favorite Web site?

Your answer will include your favorite Web site. Mine is used for discussion.

Answer:

My favorite Web site is operated by the Cable News Network, cnn.com.

b) Why is it your favorite site?

Your answer will again be dependent on your interests. Mine is again used for discussion.

I like the instant access to domestic and international news, the overview of the technology

Answer:

marketplace, and the ability to access local weather on demand. I like to know what is going on regarding important issues and require weather information for my outdoor activities. This information is available at cnn.com and is refreshed on a regular basis, giving me reason to return often.

What audience are you a
c) member of if this site is your favorite?

Your answer will define you as an audience member specific to your favorite Web site. Since cnn.com is my favorite, I am a member of the cnn.com audience.

Answer:

This audience is very broad and reaches horizontally across the entire user audience of the Internet. This audience desires news from an international source and may be educated or at least aware of the world in general.

How is this site specifically targeted at you? What **d)** information exchange is available that serves you as an audience member?

Your answer will be specific to your favorite Web site. Refer to cnn.com to discuss mine.

Since I'm interested in a number

of topics, I like the large and varied amount of information available at this Web site. The home pages lists hundreds of articles and topics that I can browse and links to a variety of news stories and features that I may want to read. The customized information choices

Answer: are also attractive and are accomplished using database interfaces.

This site is full of information that I want to know. The information is presented in a well-organized fashion and is updated regularly, which keeps me coming back daily or more often if a dynamic situation is happening in the world. I can access this information whenever I wish, and thus I am a satisfied member of this Web

site audience.

2.2.3 Answers

This exercise involves visiting a number of Web sites and investigating the ways they are targeted to specific audiences.

Point your browser to these Web site addresses and answer the same three questions in a general way for each of them.

1. www.stopandshop.com

What audience is
Q1: targeted by this
site?

Answer: *Regular shoppers
at a retail grocery
chain.*

How is this site
Q2: specifically
targeted at this
audience?

Content is

Answer:

specifically targeted the broad audience of people who shop for groceries and have Internet access at home or work. The site serves Internet users in the geographical regions served by the retail stores.

What information exchange is

Q3: available that serves this audience?

Information about special offers made at the retail sites and made through the Web site using

Answer: *downloadable coupons. A loyalty program for frequent users offering*

rebates based on usage is also available.

- www.more.com

Q1: What audience is targeted by this site?

Internet users at home or work who are interested in health products and information.

Answer:

Q2: How is this site specifically targeted at this audience?

It supplies appropriate information on health issues and supplies related products in a direct sales model.

Answer:

Q3: What information exchange is available that serves this audience?

A database interface makes customization available for regular users. Specialized information presentations and

Answer: *simplified on-line transactions based on captured data are created, similar to the amazon.com customer interface model.*

● www.nasdaq.com

Q1: What audience is targeted by this site?

A broad group of end users interested in highly detailed information on current stock prices and activity on this and other stock markets.

Answer:

Q2: How is this site specifically targeted at this audience?

It provides a comprehensive overview and detailed reporting ability on this market and its

Answer:

listings in real time (delayed by

15 minutes for proprietary reasons) as well as background and historical data.

What information exchange is
Q3: available that serves this audience?

Since information is being captured in a database system in real time as the market operates and a lot of other

Answer: *information about the market itself is stored and updated, this data is made available through Web interface for end users.*

- www.firsttrade.com

Q1: What audience is targeted by this site?

Serving a similar but more specific audience, this Web site is targeted to individuals that want to trade their own stocks and other financial instruments on the financial markets.

Answer:

Q2: How is this site specifically targeted at this audience?

All of the in-depth information resources on this site are geared toward providing an inexpensive financial instrument trading service and assisting the customers of this service.

Answer:

Q3: What information exchange is available that serves this audience?

A transaction system using database technology provides interactive customized

Answer: *interfaces for each customer and trading functionality for on-line buying and selling of financial instruments.*

● www.altavista.com

Q1: What audience is targeted by this site?

A broad audience of Internet

Answer: *users who seek information on the Web.*

Q2: How is this site specifically targeted at this audience?

Answer: *Users can search for information using a key word search engine.*

Q3: What information exchange is available that serves this audience?

A database containing text from every publicly available Web site is captured and stored in a powerful database. End users

Answer: *initiate searches through a Web interface using key words, which are returned by the database in*

the form of links to Web pages.

- www.artcom.com

Q1: What audience is targeted by this site?

A specific audience of Internet

Answer: *users who are interested in fine art showings and exhibitions.*

Q2: How is this site specifically targeted at this audience?

Users can find listings and

Answer: *information about art exhibits in galleries and museums around*

the world.

What information exchange is
Q3: available that serves this
audience?

*Limited exchange is available,
but updated information and a*

Answer: *large number of images are
presented using static Web
pages and links.*

Lab 2.2 Self-Review Questions

In order to test your progress,
you should be able to answer

the following questions:

What is the first question in any Internet communication effort?

1. _____ What am I trying to say?

- 1)** ● _____ How much money can I spend?
- _____ Who am I trying to communicate with?
- _____ What is my quest?

How is information presentation developed for Internet communication?

1. _____ Based on the previous

marketing materials

2)

- _____ Based on the needs of the targeted audience
- _____ Based on the experience of others

Which is the best way to build communication over the Internet?

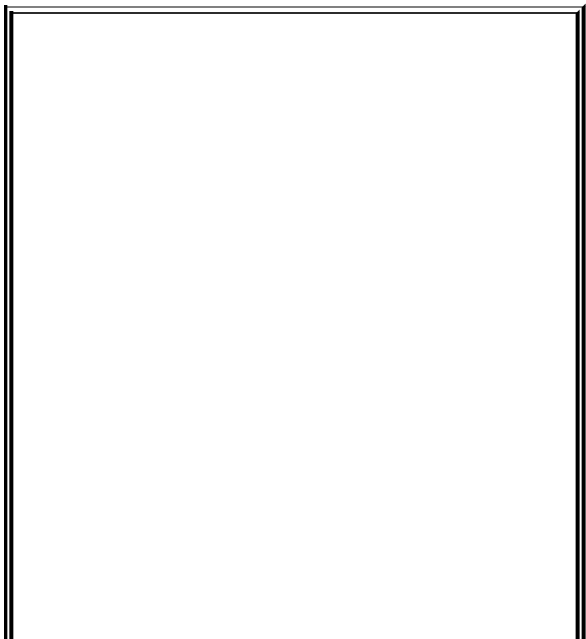
3)

1. _____ Offering lots of free stuff on your Web site

- _____ Attracting appropriate users with targeted content

Quiz answers appear in
[Appendix A, Section 2.2.](#)

Lab 2.3: The Evolution of Internet Marketing Efforts



Lab objectives

After this Lab, you will be able to

- Understand the Evolution of Internet Communications

Generally speaking, Internet marketing efforts have traditionally followed a pattern of development similar to other media. The purpose of this lab is to examine these patterns as part of our Internet marketing efforts.

Though every Internet

communication effort is different, a pattern in the evolution of Internet communication has become evident that helps us plan and create such efforts. The use of the Internet by companies and other organizations generally involves a hierarchy of six stages of development. These six stages are discussed next.

Level I Advertisement. This entry level is the use of the World Wide Web (WWW) to display a home page and a few associated or linked pages. Most companies putting up an

initial Web page have overly enthusiastic dreams of being overwhelmed by new business inquiries. The truth is that having a home page on the WWW is like putting a billboard in your basement. The home page may have emotional value for the company owners, but users don't know about or gain any value from this type of effort. The typical home page is usually linked to information like pictures of the company building and a message from the president complete with his or her picture. Useful

information for a targeted audience is not included. Often a phone number is listed for contact with the company.

Level II Promotion. The relative ease of developing static Web pages has led to extensive conversion of existing brochures and promotional materials from desktop publishing applications (electronic format) to WWW electronic pages. This caused an explosion in the number of pages on a Web site without increasing the relative value of the communication effort for

the user. Often called brochureware, this expansion of the number of pages in the company site added to the personal pleasure of owners and managers but, like the first level, did nothing to generate additional business inquiries, supply useful information exchange, or increase relationships. Though they may provide a minimal amount of direct communication via e-mail links, these sites don't respond to this communication quickly. While promoting the company was the intent of this

phase, it can more aptly be called the time-wasting phase for end users who dig around a Web site searching for needed information and end up frustrated and feeling like they should have just called or gone to the retail shop instead. These types of communication efforts may cause more harm than good.

Level III Interaction. This phase of Internet use is the first that provides value for a prospect or customer by offering meaningful information exchange. Visitors to the Web

site can receive information about something that is of concern to them and not information about the company. Once prospects or customers have located your Web site, they can learn about your products, capture information about a solution, and even determine how to purchase a specific solution to their problem. A customer can access the company site to download appropriate information that was previously available only from customer service. Using database-enabled

presentations, this interactive level allows prospects or customers to provide information to the Web site and gain desired information when they want it with no delay or hassle. The interactive level satisfies customer wants, needs, and desires and lowers costs by reducing demands on customer service. One example, the Federal Express Web site, allows a customer to determine the status of an overnight delivery. Customers, using their air bill number, can access the location of the

package, delivery status, and even the name of the person who signed the delivery receipt. In essence, the overnight delivery company has hired its customers to perform their own customer service.

Level IV Transaction. At this level the prospect or customer can initiate action and complete transactions beyond information exchange over the Internet. The prospect can respond to and accept an offer made by the company in another media. For example, a

space ad may carry a Web site address for response. That Web site address is specifically targeted to that offer and captures customer contact information to complete the transaction on-line. The customer can order a product or request a technical support visit from your company at this level of interaction. Customers or prospects may be able to order on-line using some form of credit, or customers may have a preestablished relationship and receive a bill for their purchase. At the

transaction level the company can significantly reduce selling costs for acquiring new customers and improve customer service for current customers. Interactions in traditional media, including mail, phone, and personal, are moved onto the Internet. L.L. Bean still mails catalogs, answers the phone when customers call, and operates retail stores. But in this example, the availability of the Internet communication channel has moved customer transactions into a less

expensive model and increased customer service in the process. The effect on return on investment (ROI) can be substantial, with decreased costs and increased revenue.

Level V Transformation. At this level the relationship between the company and its markets has moved from traditional to electronic. In addition, the use of this communication has affected the internal operations of the company or organization. The Internet is not used occasionally but has become

the accepted and preferred form of communication between the company and its customers. Because it does not operate in any other model, [amazon.com](https://www.amazon.com) has transformed a certain audience of media buyers into customer relationships. In the early days of Internet communication you might have had to call someone to tell them you had sent them an e-mail. Most of us have now transformed far enough that we no longer call to make e-mail notification. We send the e-mail in lieu of calling or any other

form of contact.

Transformation can have a disruptive effect. It can cause the realignment or restructuring of the relationship between a distribution channel and its markets. For example, a manufacturer can eliminate one or more channel levels, opting to use the Internet to sell directly to an end user. When a manufacturer like Dell Computer Inc. sells PCs directly over the Internet, then the chain stores like Comp USA sell less. We don't yet know the

impact of [amazon.com](https://www.amazon.com) on local or national chain booksellers.

Level VI Community. At this highest level of Internet progression a group of people with common interests are bound together by emotional involvement. The emotional connection can range from personal commitment to a subject, like a health issue, to a professional group supporting each other through information transfer. The community is a group of people with common interests in a topic or issue who may not otherwise come

together. Generally speaking, communities encourage audience members to communicate with each other as well as with the organizing body. Communities can be based on Web site presentations and then use mailing lists (e-mail subscription), collaboration forums, bulletin boards, chat rooms, IRC (Internet relay chat), or any combination of these to communicate among members. Many affinity groups have successful communities over the Internet. Clubs,

organizations, religious groups, political organizations, and hobbyists with every variety of interest have established international communities over the Internet. A company or organization can set up a community, but expecting it to flourish may be problematic. The energy of the community comes from the participants. It can be fostered or supported by a sponsoring company, but it will only be successful if it is of emotional value to the members. Many commercial Web sites have some type of

forum or bulletin board; most are unused. Software user groups supported by the development company are a good example of a commercial community. The America Online audience that communicates internally is also a very large community. The efforts by [amazon.com](https://www.amazon.com) to solicit and publish individual reviews is an effort in this direction, as are companies that build e-mail lists of active customers and use them to foster communication.

As we mentioned earlier, many

companies evolve in their use of the Internet and seem to follow the progression just described. Evaluating expansion on the Internet within your company or organization is another part of the planning process. Consider where you are today and where you would like to go in the future, utilizing the flexibility and communication opportunities the Internet can provide.

Lab 2.3 Exercises

2.3.1 Understanding the Evolution of Internet Marketing Efforts

To build a further understanding of this evolution process, let's examine communication efforts in the off-line world. Describe real-life or traditional media examples of these Internet communication evolution levels:

a) Advertisement

b) Promotion

c) Interaction

d) Transaction

e) Transformation

f) Community

2.3. Answers

To build a further understanding of this evolution process, let's examine communication efforts in the off-line world. Describe real-life or traditional media examples of these Internet communication evolution levels:

a) Advertisement

Your answers will vary. An example of this type of communication is bulk mail pieces that are sent to current resident address contacts, including flyers from the local

dry cleaner or optometrist.

Another could be general advertising space advertisements in untargeted publications with varying distribution. Many mass media television ads are also an example of this type of communication.

This type of advertising is not appropriately targeted to any audience. It provides no offer or response device or useful information for a customer or prospect. It is not useful or cost effective for most marketing activity.

Answer:

Some companies do see value in traditional, mass media advertising. Millions are spent every year on television, other

broadcasting, billboard, and space advertising efforts. But these efforts are successful due to massive size and reach. And their goals are generally based on building brand awareness, not direct relationships with customers.

The Internet is not a mass media. It is a direct media. Putting up a home page is like putting a billboard in a dark jungle. It will only be seen if found and gives no reason for end user involvement. A lot of Web sites start out at this level: a few pages acting as a billboard in cyberspace. They accomplish little except possibly frustrating prospective communicators.

Your answers will vary. A great example of this type of marketing effort is the colorful collateral material sent as part of sales packages or picked up at trade shows.

This brochure-oriented material is big on flowery language and four-color artwork but not useful for the customer or prospect. Vague assurances about total solutions and industry-leading positions do not fulfill wants, needs, and desires. Often these types of materials are more useful in making internal management feel good about glossy pictures than in building relationships with customers.

Answer:

Too many Web sites have been developed at this level of communication. Though some value can be seen in providing information to the end user via the Web, many of these sites lack the details that would make them useful for the customer. These cluttered Web sites have little audience targeting and few response mechanisms. They also tend to be full of broad information and graphics, using up development dollars and looking good for management without providing solutions for customers or prospects. And they may even frustrate these users.

c) Interaction

Your answers will vary. An example of this type of communication in traditional media is a direct marketing letter package that provides an immediate response device.

A donation solicitation from a nonprofit group requesting money and providing a self-addressed, stamped envelope (SASE) for response is a good model. A personalized business letter package with a toll-free response number is another. These both provide direct one-to-one communication of an offer to a targeted audience chosen from a database. Both also provide an easy way to answer the sender. In this way, a resolution of some type is available using the communication method.

Answer:

Web sites designed at this level are better targeted to specific audiences and might provide different content areas based on audience needs. They also provide forms or e-mail options for users to communicate with the company or organization. Requests for detailed response or specific data may be made on-line and answered in an asynchronous model, hopefully within 24 hours but maybe on the next business day (depending on geography). A Web site that provides detailed product information with a toll-free number to call and order and a form for requesting a catalog would be a good example.

d) Transaction

Your answers will vary. A traditional example of this level of communication would be a consumer or business catalog.

All of the elements required to complete a transaction are present. A targeted group of products, prices, and details about them are available. A complete set of ordering instructions and a written and telephone response option for contact, product, and payment information are immediate usable by the consumer.

Answer: Shipping details and other information are also involved.

Web sites with on-line ordering and other transaction options

have been developed at this level of communication. Sites like this usually access databases for information capture and transfer to the end user. These Web sites enable end users to complete transactions on-line, fulfilling wants, needs, and desires immediately without additional human interaction from the company or organization.

e) Transformation

Your answers will again vary, but an excellent example of this level of communication is the regular use of e-mail in the workplace today.

A year or two ago, most people

did not use e-mail regularly. Some researchers or technical people did, but the general business population did not use e-mail as a primary means of communication. This situation is now completely different. Many people use e-mail as a primary means of communication for internal purposes, often replacing the internal traditional memo process. Many people also use this communication method for personal and social reasons and stay in better contact at significantly lower cost than using phone or mail.

E-mail has transformed how people communicate with each other. It is cheaper and more efficient than other methods and has become a standard way to operate as business and

Answer:

personal communicators. Once we begin using the Internet and Web for operational purposes, we are transforming our communication methods to a new level. Often, this new Internet-based method becomes the primary means of communication and replaces older ways of doing business.

Web sites functioning at this level of evolution provide detailed information to targeted audiences. These efforts use interactive methods, giving end users access to databases of information and providing a high level of functionality to facilitate their use. Web marketing efforts at this level are replacing traditional marketing communication channels and transforming the way customers

do business with the company. The growth and use of on-line stock trading and on-line travel bookings is an excellent example of this level of communication.

f) Community

Again, your answers will vary, but a good example of community in traditional communication is the gathering of professional or social affinity groups at trade shows, conferences, and events.

In these settings a number of people with common interests meet to further their mutual goals. At trade shows manufacturers, suppliers,

vendors, and customers all interact for business and social reasons. The same type of community exists at conferences and other events. All participants put effort and money into attendance, and all achieve some type of benefit for doing so, usually by strengthening relationships of some kind.

Answer:

Though this level of communication is difficult to achieve for a very large or broad audience using the Internet, smaller segments and audiences may get involved if they see benefits. And any mutually dependent audiences, including suppliers and manufacturers or even regular customers, may be interested in such an opportunity to communicate. Parties building

on-line transactions systems with each other and other groups already involved in building relationships over the Internet are further examples of this level of communication.

Lab 2.3 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

What is the first level of Internet communication that provides value to the end user?

1)

1. _____ Promotion

- _____ Transaction
- _____ Interaction

All Internet marketing and communication efforts must progress through each of these levels.

2)

1. _____ True

- _____ False

Which is an example of Internet communication transforming a traditional communication model?

1. _____ **The use of e-mail in regular business and personal communication**

- 3) ● _____ The purchasing of products from on-line catalogs
- _____ The use of the Web instead of travel agents to research travel options

Quiz answers appear in
Appendix A, Section 2.2.

Chapter 2: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

Look at your current communication

1) efforts. Who is the current audience served by your organization's traditional media activities?

Looking at a particular communication activity, how is the information

2) presentation targeted to a specific audience and how does it meet the needs of this audience?

Look for opportunities to develop Web communication models that replace or transform existing models to Internet-based communication.

3)

Chapter 3.

Developing and Integrating Internet Communication Strategy



"Though this may be madness, yet there is method in it."

Polonius in *Hamlet*,
William Shakespeare

Chapter Objectives

In this chapter, you will learn about

- ✓ Four Forces Affecting Web Communication
- ✓ Expense Justification and Return on Investment
- ✓ Addressing Internal Issues in a Basic Strategic Internet Communications Plan
- ✓ Addressing External

Issues in a Basic Strategic Internet Communications Plan

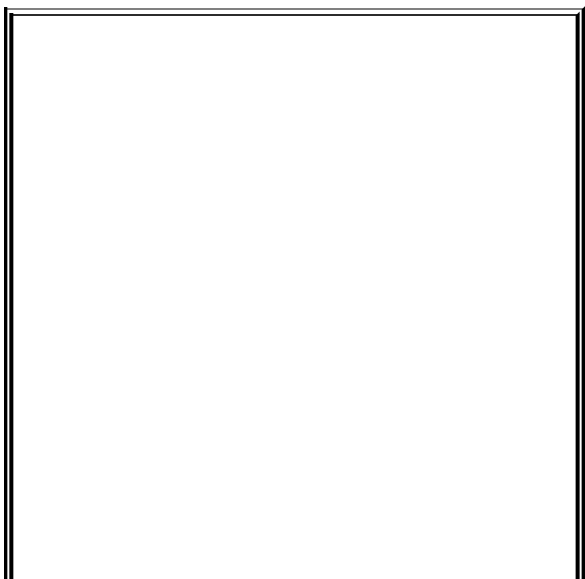
In this chapter, we will expand our discussion of Internet communication development to include the larger-picture issues found in a business unit or organization. The effective use of Internet communication includes addressing a variety of internal and external issues, which involve and affect people and businesses both inside and outside the organization developing the effort.

The first lab of this chapter will discuss four broad issues that affect almost any project but are especially prevalent in this new electronic communication medium. The remaining three labs will discuss topics that can be combined with the previous chapter, on planning and audience targeting, to create a basic but comprehensive strategic plan for Internet communications.

The three strategic components in this chapter involve business justification, internal assessment and strategy, and

external assessment and strategy. The use of Web-based commerce usually requires the use of external vendors, which is also included in the discussion of external strategy.

Lab 3.1: Four Forces Affecting Web Communication



Lab Objectives

After this Lab, you will be able to

- [Determine Strategy/Vision, Needs/Use, Tactics, and Economics](#)
- [Understand the Business Application of These Four Issues](#)

Developing and utilizing an Internet communications effort does not happen in a vacuum. As with any project, a number of forces from within an organization and outside it will affect the project. As we have

discussed, the Internet communications options are numerous and can replace and enhance almost any information flow, at any level, between any participants in any relationship.

But Internet communications will be affected by four different forces acting on the effort simultaneously: strategy/vision, needs/use, tactics, and economics (i.e., cost and ROI). These four forces will affect the justification of this communications model from a

business standpoint and will lead to either effective implementation or stagnant acceptance of the efforts inside and outside an organization.

The first force, strategy, should be the initial driving force behind the effort. The strategy or vision for use of the Internet should be developed as the best possible options for using technology to enhance relationships via communication. The use of the Internet to increase customer satisfaction through better customer service using desired

information presentations could be a sample strategy. This strategy should be realistic while creating a best case scenario. Completely shifting customer service communication to the Internet in its first three months of use is an unrealistic vision for its use.

The second force affecting Internet communication can be defined as need/use. This concept describes both the needs that can be fulfilled for audiences using the Internet and the use of the

communications methods by these audiences. The communications efforts must fulfill wants, needs, and desires. Providing appropriate customer service information will fulfill the needs of a customer audience.

At the same time, use of the communications by the appropriate audience will dictate the success, failure, adjustment, and expansion of these efforts. If the effort does not supply appropriate information, for example, it won't be used. And a Web site

that is not used is difficult to justify and fund in any organization.

The third factor affecting a Web communication effort is the tactics used in the effort. While a strategy/vision describes where you would like to go over the longer term, tactics are the things you do to execute a strategy. Building a Web interface to appropriate databases of information is a tactic used as part of a strategy to better serve the audience's customer service needs. The primary differences between

strategies and tactics are scope and the dimension of the undertaking. The strategy is the war while tactics are the individual battles.

The fourth force affecting Internet communication involves economics. This is the strongest of these factors and will define the others.

Increasing customer service through Internet communication is a good strategy because it is a justifiable expense. (Justifiable expenses will be discussed in detail in the next lab.) But if

audience needs are not met because incorrect tactics are applied, then the expense is not justified and the effort will fail due to internal economic pressures. Let's say the strategy is to increase customer service using the Web. But a database-driven system is not built and a static system is used instead as a tactic. This system does not fulfill needs and doesn't get used. It is hard to continue to fund a project that is not being used.

From another perspective,

while a strategy may be realistic and fulfill needs, a lack of economic support will limit or prevent any tactics from being utilized. In the preceding example, if the database system is not funded, then that tactic can't be used even though it is the correct one. The solution here would be to use a tactic that can be funded and that will serve some needs. The use of this tactic by the correct audience and a partial success of the strategy could lead to increased economic support and the use of more

expensive tactics to meet more needs.

These four factors strike a delicate balance and are interdependent. It's important to understand strategy, tactics, needs/use, and economics when developing Internet communication efforts because they will affect those efforts in the short and long term.

Lab 3.1 Exercises

3.1.1 Determine

Strategy/Vision, Needs/Use, Tactics, and Economics

These four factors come into play in almost any buying decision. For this exercise let's utilize a personal example. The purchase of a vehicle is a major buying decision for most people. Let's assume you need to purchase a new vehicle.

If you were to purchase a new vehicle that was generally within your means, a) what car would you purchase to fit

your personal needs?

b) Why did you pick this particular car model?

c) What would this purchase cost?

d) What car would or did you recently purchase based on your current financial situation?

e) Generally speaking, why will or did you make this purchase? How will/did the vehicle fit your needs?

f) How did you research, arrange, and finance this purchase?

g) Can you afford this purchase?

3.1.2 Understand the Business Application of These Four Issues

Using these same four factors, let's apply them to a general discussion of Web communication in your company or organization. If you aren't affiliated with a company or organization, consider one you are familiar

with.

a) What is your overall Internet communication strategy?

b) Using the Internet to communicate in these ways fulfills what audience needs?

c) What tactics would make this effort happen?

d) Would all the people you communicate with use these Internet communication methods?

e) How do economics affect your current situation or envisioned strategy?

If you are currently utilizing the Web in some way, how do the actual effort's **f)** needs, usage, tactics, and economic factors reflect your envisioned strategy?

Lab 3.1 Exercise Answers

3.1.1 Answers

These four factors come into play in almost any buying decision. For this exercise let's utilize a personal example. The

purchase of a vehicle is a major buying decision for most people. Let's assume you need to purchase a new vehicle.

If you were to purchase a new vehicle that was generally within **a)** your means, what car would you purchase to fit your personal needs?

Your answers will vary. My choice of a vehicle, if I were to get a new one, would be a Volkswagon Passat station wagon.

For this discussion this is my vision, the thing I'd like to achieve. Owning this vehicle is a

goal of mine and a significant part of my personal transportation strategy. Though this may not be a very glamorous vision for some, it is a vehicle that suits my needs exactly and is eventually achievable.

These are two important parts of any strategy. A strategy is an overall goal encompassing many smaller aspects. But this strategy must be achievable and fulfill your needs.

b) Why did you pick this particular car model?

Again your answers will vary widely, but I picked this particular car for several

reasons, all having to do with my use of the vehicle.

I commute 80 miles a day and am dependent on my vehicle to get to my office. Since I am in the car so much, comfort and consistent reliability are important. This brand of cars is comfortable and reliable. As I commute and drive a lot otherwise, I need a vehicle that will handle high mileage over time without needing replacement. These vehicles are known to have long lifetimes and can travel many, many miles.

But why a station wagon? Because sea kayaking and other pursuits involve a lot of gear, which this vehicle can carry. Why not get a truck? Comfort and

Answer:

gas mileage, which this vehicle provides and which address the commuting issue. All these reasons are based on my use of this car to suit my needs. Needs exist in the future as well. I would need to be able to maintain this car myself, and the reliability and inexpensive maintenance over time add to the suitability of this car for my personal use.

A similar situation exists in the use of the Internet for communication. Need drives the use of this technology. If Internet communication can fill a need, it will be used within an organization. A vision or strategy can be developed that fills needs. But doing so requires knowledge of needs.

c) What would this purchase cost?

Again, your answer will vary. A brand new Volkswagon Passat Wagon costs about \$25,000. Though I'd eventually like to own this vehicle, I could not meet the financial need it required at the time I purchased

Answer: *my most recent car.*

Enter economics, the other major factor in any business or organizational situation. Though my strategy is solid for meeting my needs and use, it is affected by the economics of my life.

What car would or did you
d) recently purchase based on your current financial situation?

Your answers will vary and if you haven't purchased a car, that's OK too. My most recent car purchase was a used Subaru Legacy Wagon.

Answer: Your answer to the first question in this exercise may be the same as this one. If that is the case then your strategy, usage needs, and economics are all in line with each other.

Generally speaking, why will or did you make this purchase?

e) How will/did the vehicle fit your needs?

Your answers will vary, but mine

are based on the same set of circumstances discussed in the previous discussion about my vision for a vehicle. I need a reliable, fuel-efficient car that can handle high mileage and carry a lot of stuff. This vehicle

Answer: *fit all these needs.*

Again, if your answers are the same for both questions, then your strategy solved your usage needs and you could afford the appropriate vehicle to complete the strategy. You have demonstrated a successful and coordinated vehicle ownership.

f) How did you research, arrange, and finance this purchase?

Your answers will again vary, but if you purchased a vehicle you may have shared some of these experiences. I first decided generally what I wanted. My strategy, based on my needs, was to find a used station wagon. I then spent many hours looking at classifieds listings, visiting dealerships, talking with salespeople, and calling around looking for a car that matched my vision and that I could afford. Regarding finances, my

Answer: *my strategy was to fund this purchase with my savings account.*

These efforts were all tactics that helped me complete my goal. Tactics are actions that lead to or complete a strategy. In a general analogy, my

personal mission or strategy was to purchase a vehicle that fit my needs. The actions I took, including research, traveling around town, test driving vehicles, and checking prices, were the tactics I used to achieve that goal.

g) Can you afford this purchase?

If you made a purchase, we can assume you could afford it. In my case I found a vehicle that fit my needs and that I could afford. I was able to buy it in cash using my savings at the time. I did not want to finance this purchase as I was entering graduate school at the time. I wanted the Volkswagon but settled for the Subaru based

Answer: *solely on economics.*

Any buying situation is affected by many factors at once. In this case my strategy was affected by economic factors. Use of the vehicle and its ability to fulfill my needs led to the original strategy. Tactics were utilized to complete the strategy and balance economic factors with use and needs.

3.1.2 Answers

Using these same four factors, let's apply them to a general discussion of Web

communication in your company or organization.

- a)** What is your overall Internet communication strategy?

Your answers will vary widely, but don't be concerned about setting unrealistic goals. We are initially discussing vision and strategy. Economics will always play a role but shouldn't act as an initial damper to communication planning.

In my case, I direct a training program and I would use the Internet to communicate any and all information from the program with all interested

parties. I would communicate program descriptions, requirements, class listings, schedules, grades, financial information, and everything else

Answer: over the Web. I would capture questions, registrations, and student contact information in a similar Web interface. I would also like eventually to develop a Web-based delivery method for the program's classes, and this is being currently developed for this publication. I would use e-mail to communicate directly with students, instructors, vendors, and prospects.

Though all of this communication may not all be feasible immediately, these elements make up an overall vision for Internet communication. A strategy for development of this

communication has been created.

Using the Internet to
b) communicate in these ways
fulfills what audience needs?

Your answers will again vary but should discuss your needs and how the Internet can be used to fulfill those needs. Here's my answer:

Running a training program involves publishing a lot of detailed general information for all interested students (e.g., class schedules), capturing individual registration and financial information from students (e.g., student registrations), and publishing

individual-specific information (e.g., class lists for instructors or student grades).

All of these things are now done using paper-based systems with forms, receipts, lists, and letters. But it could all be done using the Web. This would fulfill the needs of the students and instructors who want this type of information on a regular basis. It would make it easier for them to get what they need at their

Answer: convenience, and it would positively impact the needs of myself and the departmental support staff, who must now process all of this paper to supply information and make the program operate. Using e-mail is also easier and more efficient for all parties due to its asynchronous nature.

Web-based delivery is more complicated, technology speaking, but would greatly increase student and instructor satisfaction by eliminating travel, traffic, and time pressure. It would also increase the program's marketability because geography would not be important in the training process.

In my own case, an Internet communication strategy fulfills the needs of all parties involved with the program in a number of ways. Your answers should also build a strategy by fulfilling needs.

c) What tactics would make this effort happen?

Your answers will vary but should involve a short discussion of tactics you can use to develop the strategy based on the preceding questions. Review mine as an example.

The tactics I could utilize could involve several efforts. I could develop and publish a Web site that contains all of the information traditionally included in program catalogs. As courses are changed or added, this information can be updated. In addition, schedules can be published dynamically using the Web. Prospective students can request information fulfillment as well.

I use a customized database

system to operate my training program. It contains and manipulates almost all of the information I use, including student records, class registrations, instructor information, and financial data.

Answer:

Building a secure Web interface for individual student and instructor access to this database would fulfill a majority of the needs and desires of students and staff. Just moving my registration process into an on-line model would simplify that process and cut down on paper-based problems. Shifting individual communication to e-mail is another tactic that uses the Internet in a successful fashion.

Developing a Web-based delivery

method is a more involved process but could be accomplished by partnering with a technology partner or vendor that could facilitate this process.

d) Would all the people you communicate with use these Internet communication methods?

Your answers will vary but should discuss the use of Internet communication after development and availability. Again, here is my answer.

In my field, all of the parties involved with my program are adept at Internet communication and have Internet access at home or work. I have always

communicated directly with my instructor audience via e-mail. I have worked to move student communication into e-mail, but some situations, including new prospects and conflict resolutions, require communicating via telephone.

In other audiences and markets, the Internet may not be as highly used and accepted. The usage of the Internet will be impacted by the audiences it is intended to reach. Consider both initial and long-term usage potential as part of a communication strategy. This is difficult since usage will change over time and can't be measured until Internet communication is attempted. But usage can and should be

Answer: involved in justification and

measurement of communication efforts.

In my case, many students want hard copy course catalogs for reference purposes and require hard copy documents for records and processing needs. Additionally, a Web-based delivery option may be good for a specific audience, but the students who attend classes now are doing so because they want an instructor-led classroom environment something they can't get on the Web at this point. In these cases traditional communication methods can't be completely replaced by Web communication because the traditional methods are being used successfully to fulfill current usage needs.

Though Internet communication is generally better for all parties that use it, it may not be used initially by all parties involved. Usage can and should affect Internet communication strategy before and after the strategy is implemented.

e) How do economics affect your current situation or envisioned strategy?

Your answers will vary according to your current involvement levels. This question is hard to answer if you aren't working at using the Internet to communicate, but some general

points can be made. Most important, economics will always affect your strategy and use of Internet communication, either positively or negatively.

Though Internet generally makes communication less expensive, development costs will be incurred. These economic factors will impact your implementation of Internet communication strategy. Economics will always be involved when discussing usage of any effort.

In my case, the development of an on-line catalog with schedules, information, and contact options was very inexpensive and easy to accomplish using student and instructor expertise. I was also

Answer:

able to piggyback my efforts onto the Web site already developed and funded by the college where I operate. In addition, I have an e-mail system that was developed and funded by the college's Information Systems (IS) department.

Building a customized Web-based interface for my program is not possible due to economic factors. I am not budgeted for this expense, even though almost every student and other party would probably use the system if it were developed. The same is true for a Web-based delivery system at my school. Though it would probably be successful as well, it is not being funded at this time. Economics are constraining my program's

Internet communications strategy.

If you are currently utilizing the Web in some way, how do the actual effort's needs, usage, tactics, and economic factors reflect your envisioned strategy?

Again, your answers will vary based on your current activity level. In my case, portions of the Internet communications strategy have been developed using a number of tactics.

I have developed a Web site that serves as an on-line catalog. It has attracted and informed prospective students who use its contact options. Current students access schedules as

well. A majority of direct communication between myself, students, and instructors has been shifted from telephone to e-mail. These tactics fulfill the needs of the audiences they are targeted to reach and are used by them.

Other parts of the strategy have not happened due to economic factors. Development of direct, individual information exchanges for students and instructors and Web-based delivery have not been developed.

Answer:

Regardless of your current use of Internet communication, these four issues will affect an Internet communications effort. The strategy's vision should encapsulate the best possible, yet generally feasible, situation.

It should fulfill the wants, needs, and desires of audiences. This strategy will be affected by the usage of the communications effort after it is deployed. Most important, the communications effort will always be limited by the economic factors of the situation. As usage increases, economic justification can be increased. Tactics can also be employed over time to fulfill needs, match usage, and meet economic needs in stages.

Lab 3.1 Self-Review Questions

In order to test your progress,

you should be able to answer the following questions:

Searching the classifieds for the car you want is a

1) 1. _____ **Tactic**

- _____ Strategy

Which of the four factors will always drive the other three?

1. _____ **Strategy**

2) ● _____ Needs/Use

- _____ Economics

- _____ Tactics

After the development of an Internet communications effort the factor that will be used to justify economics and influence strategy is use.

3)

1. _____ **True**

- _____ **False**

Given that economics will play a role, tactics should be applied in Internet communication to

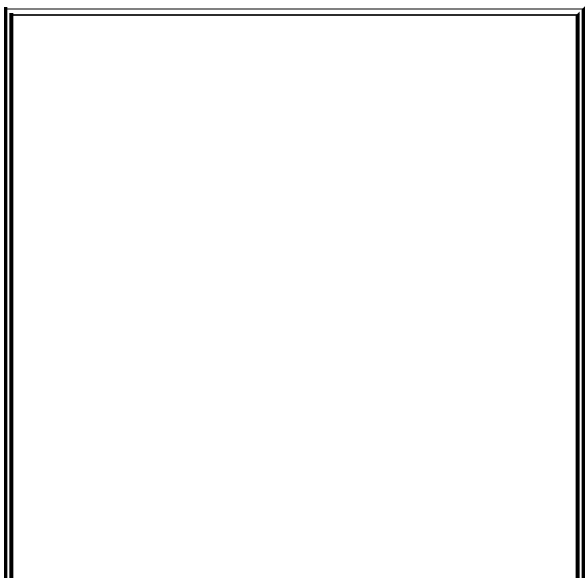
1. _____ **Complete a strategy**

4) ● _____ Fulfill wants, needs, and desires

- _____ Provide useful information and transactions

- _____ All of the above

Lab 3.2: Expense Justification and Return on Investment



Lab Objectives

After this Lab, you will be able to

- [Understand the Cost of Communication](#)
- [Assign Value to Communication](#)
- [Understand Fixed Versus Variable Delivery Costs of Communication in Traditional Versus Internet Communication](#)
- [Justify Internet Communication Based on Delivery Costs and Value](#)
- [Assign Costs to Traditional Media](#)

- Justify Internet Communication Based on Replacing Current Communication Efforts

A significant aspect in planning and executing Internet communications efforts involves the economic forces introduced in the previous lab. It is safe to say that economics drive most projects in a company or organization. Part of driving an Internet communications effort is justifying the expenses involved in developing and operating the effort.

Justification involves answering the question, Is it worth the money? In a business or organization the answer to this question will influence project funding and the future of Internet communications.

We face these types of decisions every day in any buying cycle. In the grocery store, for example, I must constantly decide if the item I am contemplating purchasing will provide a solution that justifies the purchase price of the item. Often these decisions are easy and automatic. But as

prices increase (e.g., for specialty foods), the justification of the expense becomes more involved.

Another way this issue is discussed is in terms of ROI (return on investment).

Building Internet communications efforts does cost money. This investment of funds and personnel resources requires some type of return to the organization to justify the effort. For example, building a basic Web site with limited database features could cost about \$10,000. This is a

significant investment for any company or organization. After putting this money into the effort, will the communication it provides justify the expense? Will it return valuable communication for the investment it required?

The answer to this question is yes. But providing expense justification and determining ROI are actions that you'll probably have to be involved in with your own Internet communications effort. The powers that be probably won't take my word for it.

Answering this question and others like it on your own involves examining several factors in an expense justification and ROI analysis. A large part this process involves comparing Internet communication costs and the value of that communication to other traditional media costs and types.

First you need to break down communication costs to a comparable level for each communication transaction that takes place in each specific media. Doing so is called

determining the delivery cost of communication. A very basic but useful method for determining the delivery cost of communication is simply to divide the expense involved in executing a particular media effort by the number of contacts or people that are communicated with in the media effort.

For example, in a direct mail campaign that reaches 100 contacts and costs \$50 to produce, the cost of communication is 50 cents each. That was calculated by

dividing \$50 (media costs) by 100 (number of contacts). This gave us a cost/contact of 50 cents.

Assigning value to a communications effort is another useful tool in the justification process. Value is an estimation of quality of communications. Some communication types provide a higher level of quality or value than others. Value is relative to the receiver of the communication, but properties like specific information; satisfaction of wants, needs,

and desires; and personal or customized interactions will increase the value of a communication method.

Though this is not an exact science, it can be accomplished by listing all the media types used by an organization. The media types can then be ranked in value relative to the other items on the list.

The three ways I communicate most are by phone, e-mail, and traditional mail. Looking at this list, I'd say phone is of the highest value to the end user

because it is personal and supplies specific fulfillment to specific needs in real time. Second would be probably be e-mail because it provides the same properties in a slightly less personal way. In some situations, e-mail may be of higher value because synchronous communication is not needed and text and other documents can be transferred easily. The third method, mail, has the lowest value due to time factors and personalization factors. But mailing documents is important

to some of my audiences, so that situation is also relative.

Communication value must be considered when looking at communication costs. A low-cost communication method probably delivers low-value communication. A high-cost method probably delivers high-value communication. The trick is to balance communication value against its cost. Due to the customizable and asynchronous, on-demand nature of the Internet, Internet communication is relatively high in value while low in cost.

One of the major factors contributing to the low cost of Internet communication can be defined by looking at the difference between fixed and variable communication costs. A fixed cost is an expense that stays the same in each billing cycle. At home my mortgage payment is the same predetermined amount each month. It is a fixed cost for my personal living arrangement. A variable cost for is an expense item that changes, either rising or falling, based on usage. The more it is used, the more it

costs. A variable cost me at home is my personal phone bill. The more I use my phone, the more the bill costs at the end of the month.

In another example, people's salaries and the amounts necessary to design direct mail pieces or advertisements are fixed costs in an organization. But travel and other expenses are variable costs. The more the employees travel, the more travel costs. This is the case for most traditional communication methods. As space ads are placed, mail pieces are printed

and sent out, phone calls are made, and travel is completed the communication costs rise. Costs are amortized and discounted at higher quantities, but, generally speaking, as communication increases so do the variable costs involved.

Internet communication is highly attractive because it does not involve variable costs. Internet communication can be funded at a fixed level for development and operation, including staffing and updating. That funding amount will not change as the amount of

communication increases. The \$10,000 Web site mentioned previously can serve 100 people or 10,000 people at the same expense. Communication costs are fixed and do not rise at the same rate as usage does.

Granted, significant increases in use will require added technology expenses. If a Web site is so successful that it is swamped by users, then increased server capacity and Internet connectivity must be paid for. But this is, again, an increase in fixed costs to operate at a higher level. Once

it is funded appropriately, the technology can serve the same size or even larger audience indefinitely with no need for further investment. This is a very important issue to consider when looking at ROI for Internet communication.

Looking at the communication delivery cost for each contact, the value of that communication, and the impact of fixed versus variable costs, we start to see positive reasons for justifying Internet communication. The Internet provides a low communication

cost for each contact. The Internet delivers relatively high value in these communication efforts. And the Internet can be classified as a fixed cost that does not rise as communication usage increases, unlike other types of communication methods.

Using the Internet for communication could be equated to having a phone line that is never busy for the end user and is billed for each month regardless of use. The number of callers does not affect the cost. And every caller

receives the same level of individual fulfillment by using the line. The Internet is good news for communication.

Another piece of good news is that Internet communication can be further justified by replacing existing media efforts and saving money by doing so. Developing and operating Internet communications efforts does incur expenses. Much of this expense is needed in the initial phases, before any communication can take place. But as Internet communication begins, it can replace other

types of more expensive communication. For every e-mail message I send, I am making one less phone call or mailing one less letter.

This is an excellent justification for Internet communication.

Tracking Internet use can further help justification efforts when it is directly compared to decreases in other communication media. From this perspective, Internet communication begins returning on its investment as soon as its operation begins replacing other communication

methods.

Not even considering the increases in value to the end user, the use of Internet communication can be justified by comparing its fixed costs to the variable costs of the other media. Eventually, the fixed delivery cost per contact on the Internet will drop below the variable cost per contact in other methods.

A \$10,000 Web site serving 100 customers once seems expensive. That's \$100 for each contact. But those contacts

replaced 100 phone calls at \$3.50 each, or \$350, so that amount of money can be seen as contributing to the expense of the Internet effort. Once this Web site has replaced about 2860 phone calls, it has paid for itself (\$10,000 fixed cost/\$3.50 for each phone call replaced = 2857 calls to cover the fixed cost). Once that level of communication has been achieved, the Web site is saving money for the company or organization while supplying valuable communication in the process.

Another way of looking at this point is the amortization or spreading of Internet development costs over time as usage increases. A \$10,000 Web site used once by 100 people is providing a high delivery cost of \$100 for each contact. But a Web site serving the needs of 1000 people 10 times has now delivered a delivery cost per contact of \$1 each. And the same Web site serving the needs of 1000 people 100 times has delivered a delivery cost per contact of 10 cents each.

While other media methods would increase in cost based on their variable delivery costs, the Internet actually becomes cheaper the more it is used. For this reason and the ones discussed earlier, the Internet is justifiable economically and from the standpoint of adding value to relationships. Both issues provide return on investment for Internet communications methods.

Lab 3.2 Exercises

3.2.1 Understand the Cost of Communication

Determine the cost of communication for each contact in the following scenarios:

- a) A print advertisement that costs \$200 to produce and \$550 to place once a week for four months in a newspaper with a circulation of 30,000 people
- b) A direct mail campaign with 10,000 targets that costs \$7500 to produce

c) Visiting three prospects in person in two days by a salesperson who, in doing so, spends about \$1200 in travel expenses and wages

d) Telephone customer service calls that average 7 minutes (5 on hold, 2 in communication) at \$.05/minute for the call and \$.45/minute in salary and benefits for the employee

e) Communicating with 200 customers once a week for four months using a Web site that cost \$10,000 to develop

f) Communicating with 2000 customers once a week for four months using a Web site that cost \$10,000 to develop and maintain in that time frame

3.2.2 Assign Value to Communication

Determine the relative value of each communication method:

a) Space advertising

b) Direct mail

c) Personal sales calls

d) Telephone customer service

e) Internet communication

3.2.3 Understand Fixed Versus Variable Costs in Traditional and Internet Communication

Identify the fixed and variable costs for each communication medium:

a) Space advertising

b) Direct mail

c) Personal sales calls

d) Telephone customer service

e) Internet communication

3.2.4 Justify Internet Communication Based on Delivery Costs and Value

Answer the following questions:

- How does the old adage of quality
- a) versus quantity play a role in this discussion?
 - b) Is the variable delivery cost of Internet communication low?
 - c) Does the low variable cost and relatively high quality of Internet communication justify its use?

3.2.5 Assign Costs to Traditional Media

Base your answers on [Exercise 3.2.1](#).

- a)** What was the cost of each contact for space advertising?
- b)** What was the cost of each contact for direct mail?
- c)** What was the cost of each contact for personal sales calls?
- d)** What was the cost of each contact for telephone customer service?
- e)** What was the first cost of each contact for Internet communication?

f) What was the second cost of each contact for Internet communication?

3.2.6 Justifying Internet Communication Based on Replacing Current Communication Efforts

Can Internet communication replace

a) the four other methods discussed so far in this lab?

Will replacing communication methods

b) which are viable to do so, make communication cheaper?

c) Does this situation justify Internet communication financially?

Lab 3.2 Exercise Answers

3.2.1 Answers

Determine the cost of

communication for each contact in the following scenarios:

- a)** A print advertisement that costs \$200 to produce and \$550 to place once a week for four months in a newspaper with a circulation of 30,000 people

The cost for each contact is about \$.19. This is computed by multiplying the \$550 cost by 16, the frequency of placement, and adding the production cost of \$200 to equal \$9000 ($550 \times 16 + 200 = 9000$) Multiplying 30,000 by 16 equals 480,000, the total number of contacts. Dividing \$9000 by 480,000 equals \$.01875.

Answer:

- A direct mail campaign with
b) 10,000 targets that costs
\$7500 to produce

*Dividing the cost of \$7500 by
the number of contacts gives us
a cost per contact of \$.75
(\$7500/10000).*

Answer:

- Visiting three prospects in
person in two days by a
c) salesperson who, in doing so,
spends about \$1200 in travel
expenses and wages

*Dividing the cost of \$1200 by
the number of contacts gives
the cost per contact of \$400
(\$1200/3).*

Answer:

Telephone customer service calls that average 7 minutes (5 on hold, 2 in communication) at **d)** \$.05/minute for the call and \$.45/minute in salary and benefits for the employee

The cost per contact is \$3.50. Adding together the communications costs equals \$.50 per minute (\$.05 + .45).

Answer:

Multiplying this cost by the number of minutes gives us an average cost per contact ($.5 \times 7 = \$3.50$).

Communicating with 200 customers once a week for four **e)** months using a Web site that

cost \$10,000 to develop

The cost per contact in this scenario is \$3.125. It is found by first multiplying the 200 customer contacts by the frequency of 16 to calculate the total number of contacts. Then divide the \$10,000 cost by the total number of contacts to get the cost per contact ($\$10,000/200 \times 16 = \3.125).

Answer:

Communicating with 2000 customers once a week for four months using a Web site that cost \$10,000 to develop and maintain in that time frame

Using the same equation with an

Answer: *increased number of customers drops the costs to \$.31 for each customer contact ($\$10,000/200 \times 16 = \$.3125$).*

3.2.2 Answers

Determine the relative value of each communication method:

a) Space advertising

The relative value of this type of communication is the lowest of this group.

Though space advertising can reach a large number of contacts, only a very small percentage of the audience actually looks at or reads the advertisement. Of that small percentage, an even smaller amount may be members of the actual audience you are trying to communicate with. As it is not personalized, this method is not very useful for building relationships beyond initial levels.

Answer:

b) Direct mail

The relative value of this type of communication is much higher than space advertising and not as high as more personal methods.

Answer:

It is personalized and targeted at a specific member of a specific audience. Though it may not be read by that audience member, it is at least delivered to the right person and can carry an offer aimed at that person's audience. It can be used to build and continue relationships in general ways.

c) Personal sales calls

This type of communication has the highest value possible.

Face-to-face personal communication provides opportunities to build and maintain professional relationships and deliver targeted offers and information. This does

Answer: require scheduling meetings, and the communication is controlled by the availability of the parties involved. Though this is the most valuable type of communication, outside factors, including time and money, make this type of communication increasingly difficult.

d) Telephone customer service

This type of communication is probably second in relative value after sales calls.

It is personal in nature and provides opportunities for individual attention. It allows for individual fulfillment of wants, needs, and desires. But this

Answer: method does tend to frustrate the customer if these needs can't be met efficiently, the process is dependent on the company's needs regarding time and availability of service. Customers can get what they want but not when they want it.

e) Internet communication

This type of communication is relatively high in value. Depending on the situation, it may be as valuable as telephone or even personal sales calls.

Though every situation is different, Internet communication may be as high

Answer: in value as telephone customer service or even higher. Though Internet communication may not bring the same personal value to communication, customized interfaces can provide immediate fulfillment of wants, needs, and desires. More important, these efforts are driven by the end users, giving them immediate involvement and satisfaction.

3.2.3 Answers

Identify the fixed and variable costs for each communication medium:

a) Space advertising

The fixed cost of space advertising is the expense of producing the advertisement. The variable cost is the money spent for each placement of the ad in a publication.

Though it wasn't mentioned earlier, the fixed cost should include the salary of the person coordinating the effort. Space advertising utilizes frequency of placement in publications to reach audiences. Each time the ad runs, the publisher charges a fee. These fees are discounted for frequent placement. A one-time placement may cost \$500. But a three-time placement may be discounted to \$400 each.

Answer:

Regardless of the discount, the higher the frequency of placement, the higher the cost. As this communication increases, the variable costs increase as well.

b) Direct mail

The fixed cost of direct mail also involves, salaries and production costs, such as graphic design and copy writing. Variable costs involve printing, mailing, database purchasing, and postage charges.

Developing a direct mail campaign costs the same regardless of the number of pieces being sent. The piece must be written and designed.

Answer:

But the variable costs increase for each piece sent. Again, discounting occurs as quantity increases. But, generally speaking, as communication increases so does the cost involved. Each piece must be printed, addressed from a database, mailed, and carry postage.

c) Personal sales calls

Fixed costs include the salary and benefits of the sales representative. All other costs are variable.

As the salesperson travels to meet with customers, costs are incurred. The more meetings that take place, the higher the

Answer:

variable costs. This type of communication is extremely expensive since the amount of people that can meet face to face is small, time available to do so is limited, and travel time and expense is considerable. If the number of salespeople is increased to meet customer needs, these costs increase exponentially.

d) Telephone customer service

Fixed costs involve the salary of the representative. Variable costs center around the phone call. Increasing service to meet customer needs also involves increasing employees and salaries, making salaries a

variable cost as well.

Answer:

This communication method is similar to the personal sales call except that people can communicate with significantly more customers at much lesser expense. But as communication increases, variable expenses increase as well.

e) Internet communication

Internet communication primarily involves fixed costs.

Unlike other types of communication, the Internet does not incur variable costs. Developing and maintaining Internet communication are

Answer: fixed costs. As communication

increases, these costs do not increase. If communication becomes so frequent that technology upgrades are needed to meet demand, then costs will increase. But these increases will involve higher fixed costs.

3.2.4 Answers

Answer the following questions:

How does the old adage of
a) quality versus quantity play a
role in this discussion?

Your answers will vary, but here's mine. The Internet provides a high quality of communication in large quantities.

Answer:

A Web site can be visited by millions of people, 24 hours a day, and each one can receive the information he or she seeks. The medium can serve one person and one million people in the same way, with each person receiving individual attention and fulfillment as long as the effort is developed to do so.

b) Is the variable delivery cost of Internet communication low?

Yes. The variable cost of Internet communication is

nonexistent.

The more you communicate, the more you amortize the initial development and operating costs. Successful situations may require technology upgrades to meet demand. But increases involve fixed costs and are low relative to the amount of communication they enable.

Answer:

c) Does the low variable cost and relatively high quality of Internet communication justify its use?

Hopefully, your answer is yes.

The basic justification of Internet communication is its delivery of valuable communication with no variable cost increases. Though

other types of communication are more personal, the Internet delivers individual attention and customizable interfaces to information in an on-demand format for the end user.

Answer:

As the number of users who access this information increases, the costs to deliver the information do not. No other method communication method can deliver this high-value, low-variable-cost formula. In any other communication method, costs increase with use.

3.2.5 Answers

Base your answers on [Exercise 3.2.1](#).

- a) What was the cost of each contact for space advertising?

Answer: *The cost per contact was \$.01875.*

- b) What was the cost of each contact for direct mail?

Answer: *The cost per contact was \$1.33.*

- c) What was the cost of each contact for personal sales calls?

Answer: *The cost per contact was \$400.*

What was the cost of each
d) contact for telephone customer service?

Answer: *The cost per contact was \$3.50.*

What was the first cost of each
e) contact for Internet communication?

Answer: *The cost per contact with 200 customers was \$3.125.*

What was the second cost of
f) each contact for Internet communication?

The cost per contact with 2000 customers was \$.3125.

Note that in this scenario the cost per contact was developed using the fixed costs of development and use. In the other situations variable costs were heavily involved in the equation. In this last scenario (f) communication costs decreased 100% from the previous scenario (e). The amount of communication, however, increased 100% from the previous scenario (e). This is not possible in any other method discussed.

Answer:

3.2.6 Answers

a) Can Internet communication replace the four other methods discussed so far in this lab?

The answer is a qualified yes. Though not all uses of these media can be completely replaced, many communication functions can be shifted to Internet methods.

Space advertising can be eliminated except for new business solicitation. The same is true for direct mail. Customers can be contacted via e-mail instead of traditional mailings.

Answer:

Personal sales visits can be decreased by using individual interfaces via the Web.

Interpersonal relationships can be maintained in less frequent but more satisfying meetings, with additional communication via e-mail as well. Customer service needs can be served almost completely via the Internet, with an option for telephone communication available for special circumstances, although e-mail is probably a better, more satisfying option for the customer due to its asynchronous aspects.

Will replacing communication methods which are viable to do
b) so, make communication

cheaper?

The answer is yes. Looking at the previous exercise shows us that shifting each communication activity to the Internet makes it cheaper to communicate overall.

Answer: Shifting communication to the Internet helps in two ways: (1) by decreasing the variable costs incurred in traditional methods, and (2) by further amortizing the fixed costs of Internet communication.

Does this situation justify
c) Internet communication financially?

Another yes answer. The basic justification of Internet communication is its delivery of valuable communication with no variable cost increases. The more advanced justification involves the replacement of other, more expensive, and less effective communication methods with cheaper, more valuable Internet communication.

Answer:

Though not all traditional communication costs can be eliminated completely, every interaction completed over the Internet can decrease the variable costs in other media while adding value to the relationships involved.

Lab 3.2 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

What is the cheapest communications method based on delivery cost per contact?

1. _____ Personal sales calls

1)

- _____ Telephone customer service
- _____ Web site communication
- _____ Space advertising

What method of communication is least valuable relative to the others?

1. _____ Personal sales calls

- 2)**
- _____ Web site communication
 - _____ Telephone customer service
 - _____ Space advertising

Internet communication delivers relatively_____.

1. _____ High cost and high value

- 3)**
- _____ Low cost and high value
 - _____ Low cost and low value

Internet communication involves variable costs.

4) 1. _____ **True**

- _____ False

Internet communication can replace existing communications methods.

5) 1. _____ **True**

- _____ False

Internet communication can cut communication costs while increasing communication value.

6) 1. _____ **True**

- _____ False

Lab 3.3: Addressing Internal Issues in a Basic Strategic Internet Communications Plan



Lab objectives

After this Lab, you will be able to

- [Assess and Strategize Internet Communication for Your Organization](#)
- [Assess and Strategize Existing Internal and Competitive Use of the Internet](#)
- [Assess and Strategize Internal Staffing and Capabilities](#)
- [Assess and Strategize Enhancing Functional Processes Using Internet Communication](#)

This lab discusses a number of issues inside an organization that should be addressed in a strategic Internet communications plan. Some outside issues, such as competition, can also be included, but these are looked at from the perspective of how they affect internal issues. As previously discussed, strategy involves a long-term objective for Internet communication. Discussing actual tactics to execute Internet communication strategies should be avoided at this level.

Before developing a future strategy, it is necessary to assess current situations. First we look at where we are using Internet communication. Then we can decide how we want to use this communications method to affect the future. Strategic planning can take many forms, and a comprehensive plan should include audience targeting information from the previous chapter and financial justification from the previous lab. A basic strategic plan should also assess and

strategize internal issues in the following four categories:

Organizational history and big picture overview

Current internal and competitive use of the Internet

Staffing and capabilities within an organization and needs for outsourcing

Automation of functional processes using the Internet

Organizational aspects, the big picture for a company or organization, is the first topic to be assessed and addressed in this part of the strategic planning process. Assessment and strategy topics issues should first include a brief history and a very general "30,000 feet" overview. This overview has nothing to do with the Internet but just identifies your organization's mission. A strategy can then be named that uses the Internet to further that mission.

A general look at how current

operations are completed by your organization could include a discussion of the number of products or services you supply and the sizes of the audiences involved. Again, this does not mention the Internet at first. Then a possible strategy on Internet enhancement of these operations can be completed. Looking at your organization's current status in its marketplace or other universe and then how Internet communication could affect this situation can be included in a strategic plan. All of these

discussions can be very general and broad in scope and act as an introduction to the next three subject areas.

Existing internal and competitive usage of the Internet is the second, more specific subject area. Looking at how the Internet is being used right now by your organization and others like it can lead to a strategy for how better to use the communication methods. For example, if you are using e-mail internally but not to communicate with members of your audiences, a strategy

could be to increase this type of Internet communication.

Using the evolution levels from the previous chapter is also helpful for analyzing your current use of the Internet and any competitors' or other similar organizations' usage. Evolution levels can also be used as strategy targets for increasing efforts. For example, if your organization is at an informative level and another organization is at a transaction level, your strategy could be to increase your efforts to match your competitor.

The third, even more specific area in this part of a strategic plan involves internal and external responsibilities. Quite simply, who will be responsible for Internet communication within your organization? Will it be marketing, technology, or other personnel? It should be marketing or other communication people, but this is not always the case.

What capabilities does internal staff have to develop and maintain Internet communication and what will require outsourcing to outside

help? You may have people inside that can contribute to an Internet effort. If you are reading this publication, maybe it is you. Maybe a number of people can be involved. Maybe front-end HTML and graphics development can be done inside while back-end database application building will require an outside vendor or consultant. Maybe internal technology staff can handle all aspects, with direction from the marketing and communication people. If staffing will require training to support Internet

communication, then this should also be included.

A fourth area should discuss specific strategies for automating and transforming business processes. These strategies could include automation of information exchanges between employees inside and audience members outside an organization. Wherever information exchange takes place, a strategy for transforming that exchange to Internet communication could be developed.

For example, internal use of a database could be transformed to a Web-based model for easier access and use. Hard copy mailings of information to an outside audience could be transformed to electronic formats. Regardless of the information content, exchanges of information can be assessed. Then a strategy for using Internet communication to accomplish the same things can be created.

Information exchanges may or may not involve proprietary or personal information. This and

other kinds of information may require some type of secure environment. This issue should also be addressed in the fourth subject area. Again, actual tactics for securing information (passwords, encryption, etc.) need not be discussed. But the transformation of information exchanges that need secure environments should be assessed and then included in an Internet communications strategy.

Lab 3.3 Exercises

3.3.1 Assessing and Strategize for Your Organization

Answer the following questions based on your current organization. If you are self-employed or a student, use an organization you are familiar with.

a) What is your organizational history?

b) What is your organization's big picture strategy for using the Internet?

- c) What are your current operations?
- d) What is a possible strategy for using the Internet to enhance operations?
- e) What is your status in the marketplace?
- f) What is your strategy to affect your status in the marketplace?

3.3.2 Assess and Strategize Existing Internal and

Competitive Use of the Internet

Answer the following questions based on your current organization. If you are self-employed or a student, use an organization you are familiar with.

Using the evolution of Internet communication from the previous [a\)](#) chapter, what is your existing internal situation regarding Internet communication?

- At what evolution level are your
- b)** competitors' or other similar organizations' Internet communications activities?
- c)** What is your strategy regarding competitive efforts?

3.3.3 Assess and Strategize Internal Staffing and Capabilities

Answer the following questions based on your current

organization. If you are self-employed or a student, use an organization you are familiar with.

How will you assign organizational

a) responsibilities for Internet communication?

b) What is your strategy regarding organizational responsibilities?

What are your internal capabilities for

c) Web and Internet communications development?

d) What is your strategy for outsourcing development efforts?

e) Is training of staff required?

f) What is your training strategy?

3.3.4 Assess and Strategize Enhancing Functional Processes Using Internet Communication

Answer the following questions based on your current

organization. If you are self-employed or a student, use an organization you are familiar with.

What are your strategies for
a) transforming external business processes?

What are your strategies for
b) automating existing internal processes using the Internet?

c) What are your strategies for securing information?

Lab 3.3 Exercise Answers

3.3.1 Answers

Answer the following questions based on your current organization. If you are self-employed or a student, use an organization you are familiar with.

- a)** What is your organizational history?

Your answers will vary. Your

organization should be briefly described in a context relative to the largest element of the organization it is part of. Your answer should include relative time frames for your industry.

This information is helpful in setting strategic goals. By looking at where we came from, we can begin to decide where we want to go.

The Merrimack College Webmaster Certification Program has been in existence for three years and has

Answer: increased in size and scope each year. One of the first programs of this type in the country, it is part of a professional education center that has been operating for six years and was established to provide noncredit

professional education to vertical industry segments. The center is an independent department within a traditional four-year undergraduate academic institution. It originally served the training needs of local manufacturers but has recently been successful in offering educational products that serve the financial and technology marketplaces.

b) What is your organization's big picture strategy for using the Internet?

Your answers will vary. For a future strategy in my program, we can utilize the Internet to serve the training needs of financial and technology

Answer:

companies through better marketing, customer service, and delivery methods.

c) What are your current operations?

Your answers will vary to your situation. Your answer should discuss how your organization operates, the numbers of customers or products involved, and how information is stored and used to perform the organization's functions. This information is helpful in determining where Internet communication can be utilized to automate existing systems.

Answer: Briefly, the Webmaster

Certificate Program operates dozens of courses in six sessions during each year. We have several hundred students taking one or more classes at a time. We use two database systems: one that is operated locally by our center that contains all course, instructor, registration, and financial information; and a second that contains only financial information for the college's accounting processes.

d) What is a possible strategy for using the Internet to enhance operations?

Your answers will vary widely. Since all operations involve some type of communication

and information exchange, the Internet can be used somewhere to facilitate operations.

Answer: A possible strategy for us is to automate information capture and presentation to better serve and communicate with our students. This automation process using the Internet will also facilitate internal information flow and communication.

e) What is your status in the marketplace?

Your answers will vary widely. But some attention should be focused on how your organization relates to others in

a pertinent universe or competitive marketplace. This information is useful in setting strategic goals by looking for ways that Internet communication can increase market share or cut operating costs in competitive environments.

Answer:

The Merrimack College Webmaster Certification program seeks students from the same geography as several programs run by other academic institutions in the college-rich Northeast. At this point, all have independent curricula and differ in many elements, including delivery models and approaches.

f) What is your strategy to affect

your status in the marketplace?

Again, your answers will vary. Any answer should address a slightly specific perspective on how Internet communication can affect your organization's status in its marketplace or other grouping by increasing market share, providing better value, or enhancing its services to its audiences.

Answer: Using the Internet, the Webmaster Certificate Program can look for ways to expand market share in this field outside our traditional geography using the Internet. We can also serve local students better through more efficient internal information exchange and increased communication quality

with our students.

3.3.2 Answers

Answer the following questions based on your current organization. If you are self-employed or a student, use an organization you are familiar with.

- Using the evolution of Internet communication from the previous chapter, what is your
- a)** existing internal situation

regarding Internet communication?

Your answers will vary. Due to the explosion of Internet communication, your organization may already be involved in some way. Looking at current status can help in setting a strategy for eventual use of the Internet.

The Webmaster Certification Program is operating at an interaction level. The program has a section on the college Web site for program information and schedules, a prospect capture form that forwards via e-mail, and a registration system that is not tied directly to our database system. Registrations are captured using a form and are

Answer:

forwarded in text using e-mail. We use e-mail effectively to communicate between employees and students.

b) At what evolution level are your competitors' or other similar organizations' Internet communications activities?

Your answers will vary widely based on your situation. Since Internet use is becoming so widespread, we can learn from other's use of the technology.

Many of the schools that offer similar programs near the Merrimack College are at about the same level of communication. They inform and interact with students using the

Answer:

Internet but conduct transactions using other methods. Of course, we do not know their internal use of the technology.

c) What is your strategy regarding competitive efforts?

Again, your answers will vary.

Our strategy regarding competition will be to keep abreast of Internet communication use by other parties. As we are all in a service industry, our students will need to get the same level of service available at other programs.

Answer:

3.3.3 Answers

Answer the following questions based on your current organization. If you are self-employed or a student, use an organization you are familiar with.

How will you assign
a) organizational responsibilities for Internet communication?

Your answers will vary but should include both communications or marketing staff and technically oriented

staff. It is crucial, however, that the communications-related people in your organization retain decision-making involvement. It is a common but misdirected practice that Internet communication be assigned to a technology department because of the technology involved.

As earlier chapters have demonstrated, the Internet is a communication medium.

Communications-related people must drive the process, as they are the ones that can best formulate communications interchanges.

Answer:

In my organization a small committee was formed with representatives from the marketing department and the

IS department. The marketing director for the institution chairs the committee and has final decision-making ability. She oversaw the original development project using an outside vendor. She now manages a small part-time staff of people, who have been adding to and updating the Web site for the college.

b) What is your strategy regarding organizational responsibilities?

Your organization may use a different model, but communications people must be involved. This could be part of a new strategy.

Our strategy on this issue is to

Answer: keep marketing and IS personnel working together under direction of the vice president (VP) of marketing. We are also seeking funding to staff the Web site full time. A staff position titled Webmaster will eventually be created and report to the VP of marketing and director of IS.

What are your internal
c) capabilities for Web and Internet communications development?

Your answers will be based on your organization. Your situation may range from no internal capabilities except providing content to full development abilities, including both presentations and back-end database technology.

Answer: At Merrimack we originally had no capabilities. Training was then sought for internal personnel to take over minor front-end updating. Later, students from the Webmaster Certification Program helped expand the presentations.

d) What is your strategy for outsourcing development efforts?

This answer will depend on your situation. Web and Internet development companies run from small local development operations and consultants to international advertising agencies. Vendors can be

chosen to assist in any aspect of Web communications.

Answer: Merrimack College originally contracted a specialized direct marketing agency with some experience developing Web sites for nonprofit institutions. This vendor built the original Web site, with input and direction from the VP of marketing. This site has been updated and expanded by internal efforts, discussed previously.

e) Is training of staff required?

f) What is your training strategy?

Your answers will vary. But since

you are reading this book, you must be interested in training. Identifying and training personnel responsible for Internet communication is necessary.

Answer:

In our organization staff from IS and marketing communications received training on Web development and split updating and expansion work accordingly. Our strategy is to continue to train people as the effort expands so that the workload can be assigned fairly.

3.3.4 Answers

Answer the following questions based on your current organization. If you are self-employed or a student, use an organization you are familiar with.

a) What are your strategies for transforming external business processes?

Your answers will vary widely but should touch on basic ideas for shifting business communication activities between your organization and your customers or other audience members to the Internet. This transformation is

the justifiable goal of Internet communications evolution.

The Internet is useful for traditional marketing and advertising efforts. But the use of Internet communication to automate existing business processes is a powerful method for cutting communication delivery costs in other media. Many automation strategies may initially involve using the Internet to provide better customer service for current audience members.

Our strategy at Merrimack is to develop a Web-based transaction system that can capture registration information from students and present course, class, and other information from the current

Answer:

operational database to our audience members. Basically we want to put a Web front end on our current database. E-mail can also be used more effectively to communicate with students.

Eventually, the development and use of a database-driven system can transform our traditional communication methods to Internet based. This will be more efficient for all parties involved and allow our program to serve more students at a higher level than is currently possible. Use of this system and a possible Web-based education delivery model will eventually lead to a community of students, educator, and administrators using the Internet to communicate more effectively and efficiently. This community

already exists but will be enhanced by replacing traditional communication with Internet communication.

b) What are your strategies for automating existing internal processes using the Internet?

Your answers will again vary. But using Internet communication to transform internal communication processes is another excellent method for justification of such efforts.

Strategies could include automation of sales force communication using a Web-based interface and distribution of internal information using e-

mail lists and intranet Web sites.

Answer:

Our strategy is to better utilize communication internally to process questions and comments from students as well as for traditional internal communication such as memos, budget documents, and reports. In addition, a Web-based system for our internal financial database could also be tied directly to our operational database for more efficient transfer of information.

What are your strategies for
c) securing information?

Your answers will vary but

should include acknowledgment of information security needs and what information requires security in the automated Internet communication systems.

Personal contact data, financial information, credit card information, individual accounts, sensitive product information, and proprietary information products are some of the information types that require some type of security arrangements in Internet communications. The techniques and technologies behind the security processes are discussed in another publication in this series (*Administering Web Servers, Security, and Maintenance*, Prentice Hall PTR.), but it is important to identify

Answer:

what information requires security in the development process.

In the Merrimack College project, each student would require his or her own secure access to grades, registration, and financial status information. Sensitive information and credit card or purchase order (PO) information would require a secure transfer system. In addition, the database systems where this information is stored would require protection from unwanted access while providing information to appropriate users.

Lab 3.3 Self-Review

Questions

In order to test your progress, you should be able to answer the following questions:

Before developing a section of a strategic Internet communications plan, we need to

1. _____ Devise tactics to achieve the strategy.

- 1)** ● _____ Assess the current status of the issues involved.
- _____ Decide how much money we have.

- _____ None of the above

Comparing Internet communication evolution levels is useful when assessing

1. _____ Internal use of the Internet

2)

- _____ Competitive use of the Internet
- _____ Both of these
- _____ Neither of these

A strategy for assigning responsibility for Internet communications should involve

1. _____ Only technology people

- _____ Only marketing or communications people
- _____ A combination of both with communications people in charge
- _____ A combination of both with technology people in charge

Automating information exchange systems can enhance communications for audiences that are

1. _____ Inside your organization

- _____ Outside your organization
- _____ Interested in information that must be secured

● _____ None of these

● _____ All of these

Lab 3.4: Addressing External Issues in a Basic Strategic Internet Communications Plan



Lab Objectives

After this Lab, you will be able to

- [Assess the Strategies of External Parties](#)
- [Involve E-Commerce Vendors](#)

Another area for assessment and strategizing as part of a basic Internet communication plan involves external parties and organizations that may add value, gain information, or help support your Internet communications efforts. While

the previous lab discussed internal parties and issues, this lab addresses parties outside an organization. These could include participants from several groups: existing relationships, partnerships, and channel participants.

These external parties can also be included in audience targeting activities, discussed earlier. They are included here again because they should be included in a strategic planning process. Building Internet communications with these parties may involve building an

extranet, an information system using the Internet built for external parties but not for the general Internet audience.

Existing relationships could include external employees, contractors, vendors, suppliers, and other parties that help your organization conduct its operations. In each of these situations direct benefits can be received by all organizations involved. Providing information and transactions using the Internet facilitates communication to these external parties that would be

required in another medium. For example, companies or organizations that use the same print vendor or office supplier can build an Internet communication system to facilitate regular transactions.

Partnerships with other organizations could include trade associations, business partnerships, referral activities, or any situation that provides a more indirect benefit. These types of external parties may be seen as an example of "We'll help you and you'll help us." Perhaps two companies that

provide different services to the same customer will work together to support each other's activities. A flower shop, caterer, and photographer in the wedding business are examples. Mutually positive contributions can be supplied through Internet communication for each external party involved.

Channel participants are individual external companies that supply, buy, or sell you your products or services. In these situations, mutual benefits can be provided for

both parties through Internet communication. Though these are also existing relationships, they may be grouped separately in a strategic plan as they may require different communication systems. They are mentioned here because they are external parties. Channel participants are usually customers and may also be addressed in the audience targeting section of a strategic plan.

For each of these external parties a brief strategic discussion should involve

several topics. An identification of the outside party and the nature of the relationship that exists should come first, followed by a look at the external parties' information needs and what information could be supplied to meet these needs, and a look at possible transactions that can be conducted over the Internet.

For a flower shop external parties could include the following:

- Flower suppliers are an

existing direct relationship. Information exchanges could include product and account information. Transactions could include buying wholesale flowers daily.

- Funeral homes are a regular channel, reselling flowers on the shop's behalf. They could be considered a customer as well. Information includes available flower products and special requests from families. Transactions could

include purchasing flowers as needed for services.

- Wedding planners are separate parties that act as partners. Information includes special packages, sample work, and schedules. Transactions could be referrals of contact information. Reselling floral services would make the planner a channel participant.

A fourth type of external party should also be introduced in a

strategic Internet communications plan. E-commerce vendors and strategies for their involvement need to be addressed. These types of vendors may be needed if your organization is interested in completing transactions over the Internet and if those transactions require fulfillment of products using traditional methods.

These types of vendors can serve three significant roles and have experience doing so from other types of direct marketing activities, including

catalogs and other mail and phone order efforts.

The first part of an e-commerce transaction that may require an outside vendor is the capture and processing of information from the end user. In the [amazon.com](https://www.amazon.com) example, this information includes product selection, customer contact, shipping, and payment information. This information is captured and stored in a database operated by [amazon.com](https://www.amazon.com). If your organization is interested in capturing orders, a database-

enabled Web site should be utilized. An outside vendor can be utilized to supply and operate a database-enabled Web site on your organization's behalf if your organization does not do so.

The second aspect of e-commerce transactions that may require an outside vendor involves processing the financial side. Many direct consumer transactions involve credit cards. Accepting and processing credit card orders requires the involvement of a vendor in the form of a bank or

credit card processing company to facilitate the transactions. When you utilize a credit card to make a purchase in a retail setting, the clerk usually forwards your credit card information electronically using the cash register or other electronic device. The company at the other end of that communication, which immediately approves or denies your transaction, is some type of credit card processing vendor. The same is needed for Internet-based transactions. If you already conduct credit card

transactions, then you may be able to utilize the same vendor in your Internet communications.

If your organization is interested in other types of financial arrangements, then a customized financial system may be built. For example, many companies and government organizations complete transactions using requests for quotations (RFQs), requests for proposals (RFPs), purchase orders, and invoices. These systems usually involve existing relationships and could

involve development of customized communication applications using the Internet to complete these transactions.

A third e-commerce element that could involve an outside vendor is fulfillment or distribution of products. If an order for a specific item is completed over the Internet, then that item is usually shipped directly to the customer. This process can be handled by an internal shipping department, or an outside distribution vendor could be utilized. This vendor stores

your inventory on your behalf and ships it to your customers based on contact information and shipping details you supply.

Lab 3.4 Exercises

3.4.1 Assess the Strategies of External Parties

Answer the following questions based on your current organization. If you are self-

employed or a student, use an organization you are familiar with.

- a)** Describe existing external relationships for your organization.
- b)** What are their needs?
- c)** What information can be supplied via the Internet?
- d)** What transactions or e-commerce can be conducted?
- e)** Describe current or possible partnerships.

f) What are their needs?

g) What information can be supplied via the Internet?

h) What transactions or e-commerce can be conducted?

i) Assess channel participants.

j) What are their needs?

k) What information can be supplied via the Internet?

What transactions or e-commerce can

1) be conducted?

3.4.2 Involve E-Commerce Vendors

Answer the following questions based on your current organization. If you are self-employed or a student, use an organization you are familiar with.

a) How will your Internet communication effort capture orders and other

information to conduct e-commerce?

b) Will a vendor be required to process the transactions?

c) Will a fulfillment center be required, or is this done internally?

Lab 3.4 Exercise Answers

3.4.1 Answers

Answer the following questions based on your current

organization. If you are self-employed or a student, use an organization you are familiar with.

Describe existing external
a) relationships for your organization.

Your answers will vary widely depending on your individual situations. Relationships could involve external employees, regular vendors, and any number of other parties that would benefit from Internet communication to facilitate your interactions.

My Webmaster Certification

Answer: Program at Merrimack College is entirely dependent on external relationships for its operation. The instructors in the program work outside the college in the Internet communications field. These people are contracted to teach the courses in the program and need access to the information presentations created for the program.

b) What are their needs?

Your answers will vary widely depending on your individual situations. Regardless of the actual relationship, some need for information access and exchange will probably exist.

Answer:

My instructors' needs include class composition lists, class times, and class locations. They also need the ability update this information as changes occur and to submit grades for completed courses.

c) What information can be supplied via the Internet?

Your answers will again vary widely depending on your individual situations. But almost any information can be communicated using the Internet.

Answer:

All of the information my instructors may need could be published, updated, and captured using Web-enabled database

technology in an extranet environment.

- d)** What transactions or e-commerce can be conducted?

Your answers will vary widely depending on your individual situations. In my situation instructors must sign contracts

Answer: *for payment of their services. This process could be conducted using a Web-based system using individual identification and confirmation processes.*

- e)** Describe current or possible partnerships.

Your answers will vary. My program operates in partnership with the World Organization of Webmasters (WOW), the trade association that has coordinated the Webmaster training program of which this publication is part.

Answer:

f) What are their needs?

Your answers are dependent on your situation. The WOW partnership requires the use of the Merrimack College Webmaster training program as an example of a successfully operating training program for other schools and training organizations to review. This partnership also provides

Answer: *opportunities for cross-*

marketing between the two organizations and requires the capture and forwarding of prospect contacts data. In addition, it provides a regular information exchange between the two organizations and their respective members regarding education, experience, and professional opportunities.

g) What information can be supplied via the Internet?

Your situation is individual. Almost any partnership would involve mutually beneficial information exchanges. In my situation program information can be linked between the two organizations and communication can be

facilitated between organization members.

Answer: Appropriate captured data from end users seeking more information or communication could also be forwarded to either party. In addition, communities of educators, students, and professionals can be built around Web-based publishing, interactive discussions, and even Web-based training delivery systems.

h) What transactions or e-commerce can be conducted?

Again, your situation is independent of mine. However, you may see opportunities to

complete business transactions with partners using Internet communication.

Though it may not be needed, it would be possible, using the Internet, for both my organization and WOW to complete transactions for each other. WOW could conduct on-line registrations for my program's courses and Merrimack College could capture on-line WOW memberships.

Answer:

This would require strong relationships and communication regarding financial information. For this reason, completing transactions for partners may not be feasible or practical. It would probably be better for each organization to participate in a joint Web presentation but

operate separately behind the scenes. Separate transaction screens could be operated on our respective Web sites linked from the joint site. Other partnerships may be able to integrate operations on the same site.

i) Assess channel participants.

Your answers will depend on the nature and product distribution of your business or organizational model. Channel distribution models include multiple parties buying and selling products from each other in a linear fashion.

For example, many products are

made by manufacturers. These manufacturers sell the products to distributors. Distributors then sell the products to wholesalers. Wholesalers sell the product to retailers. Retailers sell to consumers of the products.

Answer: The Merrimack College Webmaster Program does not participate in a traditional channel environment, but we have acquired course registrations in a similar manner. Some private training companies have forwarded registrations into the program. In this case, students pay their registration costs to the training company. That company then pays the college the appropriate registration fee for the course, which is usually discounted in a distribution arrangement. In this

case, the training company is acting as a channel participant with the college by reselling a course offered by the college.

j) What are their needs?

Your needs will vary significantly depending on your channel activity. This runs the gamut from product information and pricing to order status, inventory availability, and financial transactions and reporting.

When private systems are built for channel participants, the systems are considered to be extranet, or information systems using the Internet built for external parties but not for the general Internet audience.

Answer:

In the Merrimack College example, the channel participant would need public information, including course offerings, times, and locations. Channel participants would also require customized pricing information and real-time space availability data.

k) What information can be supplied via the Internet?

Again, your answers will vary. Any information that would normally be distributed and communicated between channel participants could be done so over the Internet.

As channel participants are already in a business

relationship, it is relatively simplistic to determine what information is regularly exchanged and then to develop Internet communication systems to conduct this

Answer:

communication. Keep in mind that the flexibility of Internet communication could mean that channel participants could have an individual presentation of information based on their needs and pricing structures.

Merrimack College could provide course details and availability information through a customized interface, secured for use only by the channel participant. This could be considered an extranet application.

What transactions or e-commerce can be conducted?

Your answers will vary. If you are currently involved in regular transactions with any number of channel participants, then Internet communication can be conducted at the transaction level to facilitate and economize these activities. Payment or purchase order information can be communicated as part of the process, but the variety of different financial systems will have to be considered in the development process.

Answer:

The Merrimack College example could involve the channel participant capturing registrations and forwarding

them directly into the Merrimack College registration system via e-mail. Or a customized interface into the same system could be deployed using the Web.

3.4.2 Answers

Answer the following questions based on your current organization. If you are self-employed or a student, use an organization you are familiar with.

a) How will your Internet communication effort capture orders and other information to conduct e-commerce?

Your answer will vary based on your situation. If you are planning on conducting some type of transaction using the Internet, then you will need to capture information, process it, and return information to the end user.

If Merrimack College implements an on-line registrations system, then registrations can be captured via the Web site in a secure environment. Students can create accounts initially and then register later using an account and password system similar to [amazon.com](https://www.amazon.com). This

Answer:

system can be built on the Merrimack College Web site, which is hosted by a third-party Web hosting company that can support database-enabled Web sites.

- b)** Will a vendor be required to process the transactions?

Again, your answers will vary widely. But if you plan on conducting e-commerce directly with end users, then you will probably need to accept and process credit card transactions. Other types of transactions, including purchase orders or extension of payment with invoices, would require customized transaction applications tied into your

existing systems.

If you do elect to accept credit card transactions, then you will need to involve some type of vendor to process these transactions on your behalf. This vendor may be a bank or a specialized credit card processor or another financial institution that confirms the availability of funds and debits the appropriate account on your behalf.

If your company or organization currently accepts these types of transactions, then you might already have a vendor for these services. If not, you may need to set up a merchant account or other relationship with this type of company. This vendor will need to be included in the tactical development of your

Answer:

Web communication efforts because information on transactions will need to be forwarded to that vendor securely as it is captured over the Internet.

Merrimack College has a relationship with a bank, which handles our credit card transactions now. In the e-commerce system, our vendor can supply a preexisting application that will be run on the Web server. After capture on the Web, credit card information is encoded and forwarded to the bank using a dedicated data communication method. These transactions are approved or denied and returned to the Web database application, instantly, to continue the transaction.

c) Will a fulfillment center be required, or is this done internally?

Your answers will depend on your situation. If you are conducting e-commerce and providing products of some kind to a customer, then you need to fulfill orders. Depending on volume, many companies utilize internal fulfillment operations. Other companies and organizations outsource this function to distribution centers or fulfillment houses.

In this model your company or organization would purchase the products from your suppliers and forward them to the distribution center. Products are

coded for sophisticated inventory control systems.

Answer:

Orders would be forwarded electronically after capture and processing by your company. Fulfillment and shipping would be handled by the distribution center, which charges a fee and shipping expenses back to your company. Many distribution centers are very large operations that fulfill orders for many companies and are located in centralized locations near transportation hubs.

Since the Webmaster Certification Program delivers training on our campus, we don't require these services. But if you ordered this book or any other product from an on-line merchant, it was probably sent to you in a similar manner.

Lab 3.4 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

Examples of external parties don't include:

1. _____ **Companies that resell our products**

1) ● _____ The IS department

- _____ Trade associations in our industry
- _____ Vendors we regularly do business with

Channel participants may also be considered as customers.

2) 1. _____ **True**

- _____ False

Before creating a strategy to use Internet communication with an external party, we should

1. _____ **Call in a consultant**

3) ● _____ Develop tactics for communication

- _____ Asses communication needs
- _____ Create security systems

External parties may have both information and transaction needs that can be automated through Internet communication.

4)

1. _____ True

- _____ False

Merrimack College has examples of which of the following?

1. _____ Partnerships

- _____ Existing relationships

- 5)** ● _____ Credit card transaction vendors
- _____ Distribution vendors
- _____ All of these

Possible external e-commerce vendors include:

1. _____ Database hosting services

- 6)** ● _____ Credit card processing companies
- _____ Product distribution companies
- _____ All of these

Chapter 3: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in a classroom discussion and assessment.

Assess current internal organizational

situations, including operations, competition, current usage, staffing responsibilities, and opportunities for transforming business processes.

1) Assembling these topics into a single report, what is a possible overall strategy for utilization of Internet communications?

Assess external parties, including existing relationships, partnerships, channel participants, and e-commerce vendors.

2) Assemble these topics into the same report and add it to a possible overall strategy for utilization of Internet communications.

With a strategy now in place, consider current internal economics and add that to the plan. Will the current financial situation affect the strategy?

3)

- 4) Assess financial justification for Internet communication based on the replacement of traditional variable-cost media with fixed-cost Internet communications. Compare this assessment to the economic strategy mentioned in item 3. Can the justification affect the strategy?

Chapter 4. Web Site Architecture



Hold a mirror up to Nature.

Hamlet, William Shakespeare

Chapter Objectives

In this chapter, you will learn about

✓ [Using Mapping to Build](#)

Presentations

✓ Determining and Mapping Information Exchanges and Presentations

✓ Building Presentations Using Story Boards

In this chapter, we return to the details of building Internet communications. The quote from *Hamlet* must be given strong consideration in this process. Successful Web communication should reflect

successful traditional communication activities.

Internet communication must be based on the basics discussed earlier in this book. Audience wants, needs, and desires must be fulfilled. To build or design Web sites and other elements requires a foundation based on audiences and their information goals. If this is accomplished, then the audience will participate in the effort.

This chapter introduces a process that is useful for

building Internet communication efforts that will be used by audiences. The first lab helps draw a comparison between mapping physical movements and movements on a Web site. The second lab uses a scenario to document current successful communication as a way to build Internet communication models. The third lab introduces a reversed method of building Web sites based on the audience information objective.

Lab 4.1: Using Mapping to Build Presentations

Lab Objectives

After this lab, you will be able to

- [Describe Movements in the Physical World](#)
- [Map in the Physical World](#)
- [Provide Directions on the Internet](#)
- [Map a Web Site Visit](#)

The Internet is rife with road analogies for good reason. Though it is really made up of clients, networks, and servers, the road analogy works well for envisioning the information exchanges that take place. A road analogy is useful for envisioning and describing movements through information and transaction presentations.

Presenting information and interactivity on the Internet is similar in many ways to giving directions to a driver trying to find a specific physical location.

Like the driver of a car trying to find an address, end users on the Internet must be presented with an easy-to-follow route to their information goal.

The road analogy can be used to help describe and build Web site interactions. Every Web site has a URL (uniform resource locator) or address that is particular to that site. This address can be found by anyone on the Internet and brings up the Web site's home or index page. This address is similar to a major interstate

highway that any driver can find on a map. From there an exit is usually involved to bring drivers off the main highway into a smaller section of roads in a town or neighborhood. Links off a home page serve a similar role on the Internet, bringing users closer to the information they seek based on their audience needs. From this point, a series of turns or other directions lead a driver to the desired location. The same is true on the Internet, though the number of steps should be as small as possible to facilitate

the process and not frustrate or confuse the end users.

Navigational aides, such as landmarks and road signs are usually included in driving directions as well. These types of elements can and should be involved in the construction of an Internet communications effort to facilitate audience access to information goals.

Directions are usually given from the perspective of the driver. The same is true with Web sites. They must be designed for the convenience of

the end user. Different drivers may have different routes and different goals. The same is true on the Internet. Different audiences will have different goals requiring different presentations directing them to their goals.

Building Internet communications efforts can be facilitated through the use of flow charts to document information presentations. The end user's travel, route, or journey through the presentation can be designed using this system. A reverse

engineering process will be used in this chapter to demonstrate these concepts. Reverse engineering is a process in which a final version of a project is deconstructed into its smaller parts to see how it was built. A currently active Web site can be reverse engineered to demonstrate the information goals sought by a particular audience and the route an audience member must take to reach that goal. We can look at existing Web sites and build directions and flow charts based on their

presentations.

Lab 4.1 Exercises

4.1.1 Describe Movements in the Physical World

To demonstrate mapping Internet communication, let's take a look at how mapping is done in the physical world. Write down directions to a physical location like your

house, school, or workplace from a major interstate highway.

a) What is the interstate highway?

What exit do you use to get to your
b) location and what does the exit sign say?

c) What are the rest of the directions and landmarks involved?

d) Is there a more complicated route that you are not explaining?

e) What is the final location?

4.1.2 Map in the Physical World

Now let's create a diagram or flow chart of this set of directions. Fill in the squares and connect them according to the directions listed in the previous exercise. If necessary, disregard unneeded boxes or add more.

Write the interstate highway number in the square in the upper left square.
What does the flow chart look like?

a)

Write the final location in the bottom right square. What does the flow chart look like?

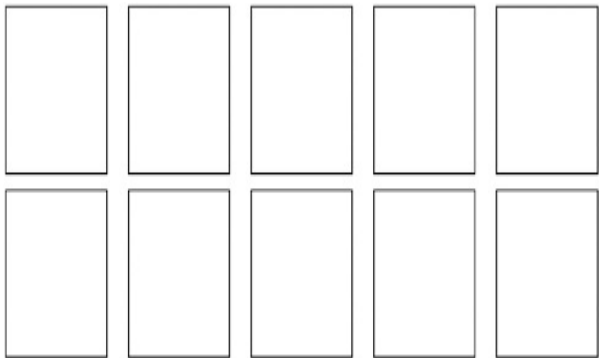
b)

Fill in the exit number and what the signs say next to the highway number box and connect the two boxes with an arrow. What does the flow chart look like?

c)

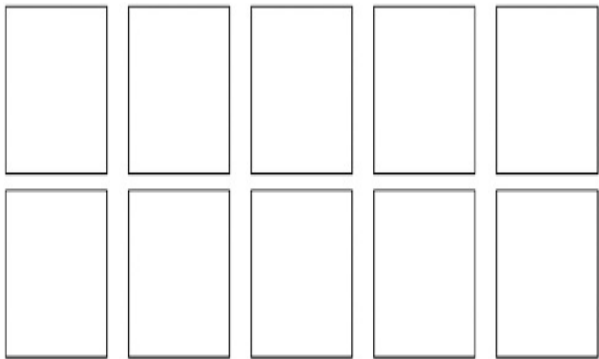
Fill in the rest of the directions and any landmarks, with each direction in separate squares. How does this affect the flow chart?

d)



Connect the squares in order until you reach the final location. What does the flow chart look like?

e)



4.1.3 Provide Directions on the Internet

Now let's begin mapping on the Internet by describing a set of

directions to the information we regularly access.

Point your Web browser to the home page of your favorite Web site.

a) Who operates the Web site?

b) What is the URL or Web site address?

c) What is the first link you click to access your information objective?

What are the additional links or steps
d) you took to reach your information objective?

List any icons or other landmarks that you could or did use to reach your information objective.

a) How can they be described?

b) What was your information objective?

4.1.4 Map a Web Site Visit

Using the same grid of boxes, build a flow chart of your visit to the Web site.

Fill in the Web site home page in the upper left box. What does the flow chart look like?

a)

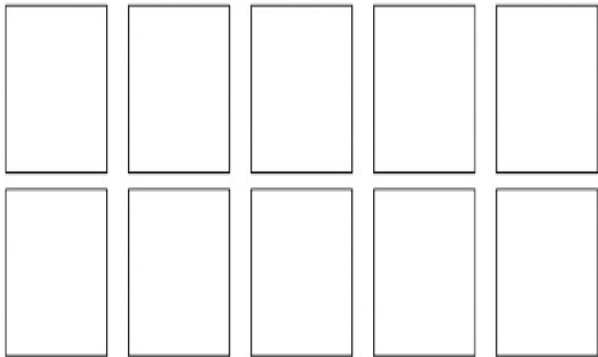
Write your information objective in the

lower right box. What does the flow chart look like?

b)

Add the first link or other action you took to reach your information objective. How does this affect the appearance of the flow chart?

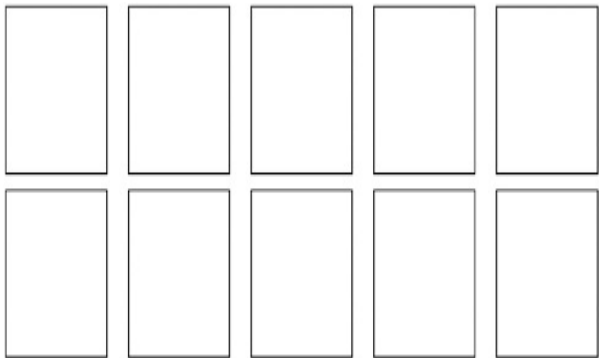
c)



Add any additional links or steps you took to reach your information objective to individual boxes and connect the boxes in a linear fashion. What does the flow chart look like now?

d)

Add any icons or other landmarks that you could or did use to reach your information objective in the appropriate box. How does this add to the appearance of the flow chart?



Lab 4.1 Exercise Answers

4.1.1 Answers

To demonstrate mapping Internet communication, let's take a look at how mapping is done in the physical world. Write down directions to a physical location like your house, school, or workplace from a major interstate highway.

a) What is the interstate highway?

Your situation will be specific to your physical location. In describing the directions to my school, the closest interstate highway is Rt. 495 in Massachusetts. This is the best

route for people coming from the north, east, and west. Another major highway is Rt. 93. This is the best route for people coming from the south.

Answer:

In my situation, two different audiences utilize two different sets of directions to get to the same place. It is apparent that different audiences require different routes to reach their goals. This is also true in Web site presentations. Different audiences require different presentations to meet their communication goals.

What exit do you use to get to
b) your location and what does the exit sign say?

Your answer will be different. My answer for the first set of directions is exit 42A, which is Rt. 114 East. The second set of directions would be exit 41, which connects to Rt. 125 North.

Answer:

What are the rest of the
c) directions and landmarks involved?

Again, your answers will vary. My directions for the first group are to proceed straight through a number of traffic lights and the college campus will be on the right. Landmarks include a large hill and an Italian restraunt on the left before the campus on the right. In the second set the driver is to take a right off the

Answer:

exit. Next the driver proceeds several miles to the junction of Rt. 114 and Rt. 125, where the college is on the left. I usually tell people to start anticipating the intersection once development starts after a long undeveloped stretch of road.

d) Is there a more complicated route that you are not explaining?

Your answers will vary from mine. For both sets of directions, other routes exist that may be shorter or more direct coming from other directions.

These different routes involve more complicated steps,

including multiple turns and confusing intersections. Often directions that are given to a driver provide the easiest route to a location. And that easiest set of directions is given from the driver's perspective. It is the people giving directions that decide the easiest route based on the driver's needs, not their own.

This is also our role in building Internet communications systems. They should be built to present information in the easiest fashion, from the end user's perspective.

e) What is the final location?

Your answer will be based on your situation. The final location for my directions is Merrimack College in North Andover, Massachusetts.

Answer:

The final location for Web end users should be their information objective. It is up to us as Web communications experts to facilitate that objective as much as possible.

4.1.2 Answers

Now let's create a diagram or flow chart of this set of directions. Fill in the squares

and connect them according to the directions listed in the previous exercise. If necessary, disregard unneeded boxes or add more.

Write the interstate highway number in the square in the upper left square. What does the flow chart look like?

a)

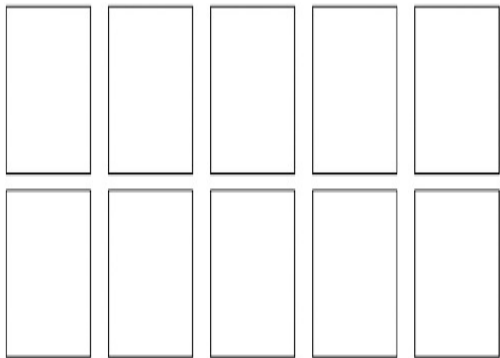
Yours will vary. I've included both sets of directions in this exercise so mine looks like this:

Answer:

Rte. 495 South				
Rte. 93 North				

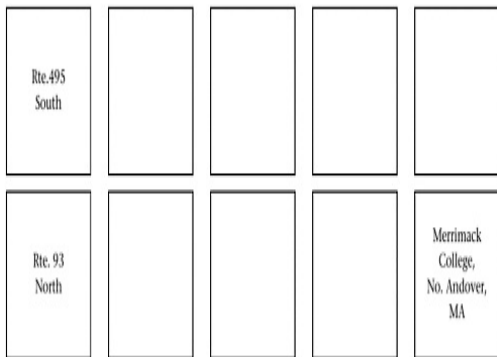
Write the final location in the bottom right square. What does the flow chart look like?

b)



Again yours will vary. Here's mine:

Answer:

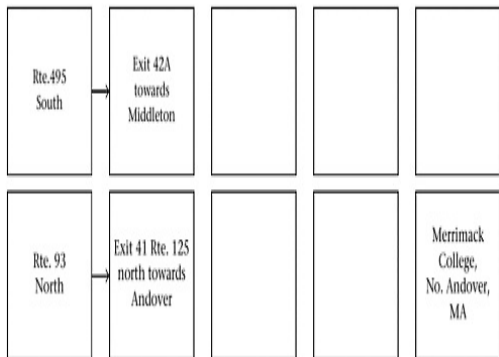


Fill in the exit number and what the signs say next to the highway number box and connect the two boxes with an arrow. What does the flow chart look like?

c)

Yours will be based on your situation but will look similar to this:

Answer:

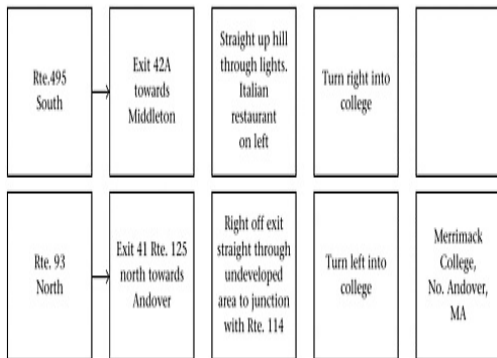


Fill in the rest of the directions and any landmarks, with each direction in separate squares. How does this affect the flow chart?

d)

Your answer will vary but should look something like this:

Answer:

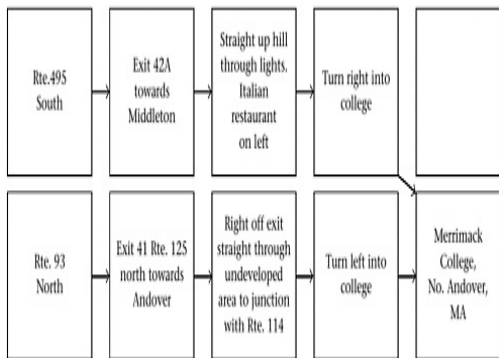


Connect the squares in order until you reach the final location. What does the flow chart look like?

e)

*Again, your answer will differ.
Mine looks like this:*

Answer:



4.1.3 Answers

Now let's look at mapping on the Internet by building a set of directions to the information we regularly access.

Point your Web browser to the home page of your favorite Web site.

a) Who operates the Web site?

Your answer will be different

Answer: *based on your favorite Web site.
My answer is CNN's Web site.*

b) What is the URL or Web site address?

Answer: *Yours will vary accordingly. Mine is www.cnn.com*

What is the first link you click to

c) access your information objective?

Your answer will be based on your specifications. In my situation I clicked on a link to the weather section.

Answer:

What are the additional links or
d) steps you took to reach your information objective?

You will have a different experience. In my situation a screen came up that provided a form to fill in my zip code or closest city, which I did. After pressing the submit button, a database interaction produced a screen with the latest weather information and a forecast for

Answer:

my city.

List any icons or other landmarks that you could or did use to reach your information objective.

a) How can they be described?

Your answer will differ. In my situation, I clicked on the word "weather" in a list of general topics on the index page of the site. The next screen I saw had a heading, text, graphics, and advertisements related to weather.

Answer:

b) What was your information objective?

Your answer will define why this

Answer: *is your favorite site; mine is the local weather.*

4.1.4 Answers

Using the same grid of boxes, build a flow chart of your visit to the Web site.

Fill in the Web site home page in

the upper left box. What does the flow chart look like?

a)

Yours will vary but should look similar to this:

cnn.com				

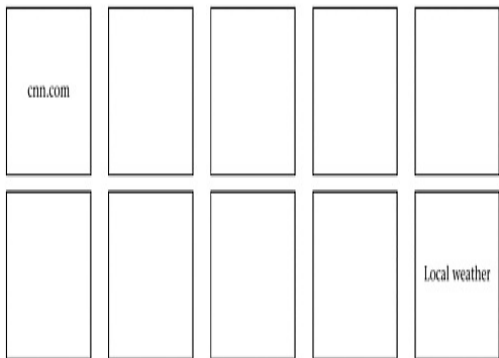
Answer:

Pulling up a Web site can be likened to a subset of linked pages on the information superhighway. The first step in giving physical directions to describe a single, large location that any person can find on a map. When mapping a Web site visit, the index or home page can serve as that initial starting point. There is only one URL like it on the Internet, and anyone can find it.

Write your information objective in the lower right box. What does the flow chart look like?

b)

Your answer will be different. My flow chart now looks like this:



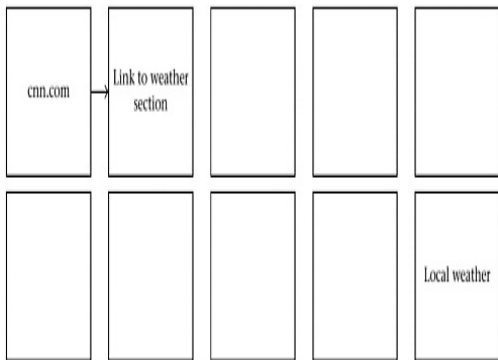
Answer: When building Web sites for Internet communication, it is imperative that the architecture be based on the information objectives of the audience. That is why we listed our objectives on the flow chart first in this exercise.

Add the first link or other action you took to reach your information objective. How does this affect the appearance of the flow chart?

c)

Your answers will vary. My

answer was to click on a link to a weather section.



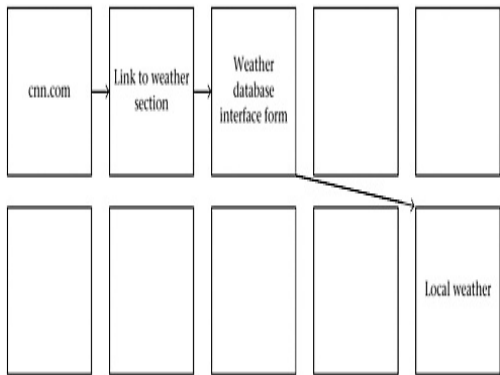
Answer:

The second step I took here, after pulling up the URL, was to choose a specific grouping of information. Referring to the previous exercise, this can be compared to the exit off the highway. This exit off the index page sends us into a smaller subgroup of information close to our objective.

Add any additional links or steps you took to reach your information objective to individual boxes and connect the boxes in a linear fashion. What does the flow chart look like now?

d)

Your answer will differ. Mine looks like this:



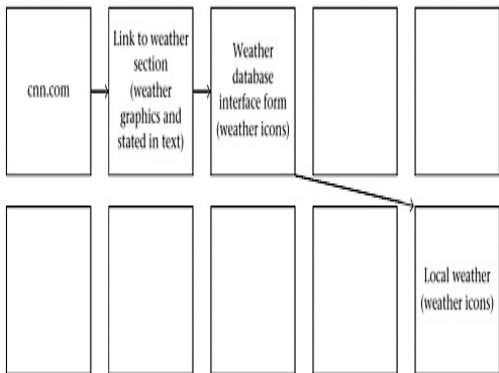
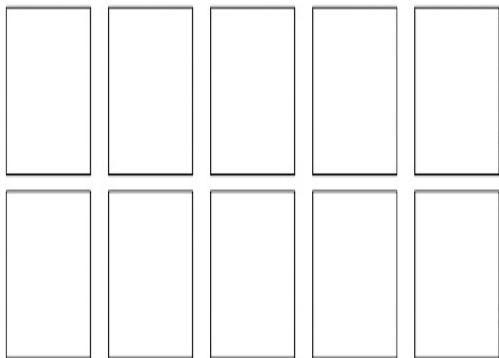
This next step actually involved a couple of substeps, which are combined here for clarity's sake. I entered a zip code and pressed the submit button. The database

Answer: returned the information I was seeking. This is also similar to a physical set of directions that usually include a number of small course changes upon nearing the desired location. Also similar to physical directions, the route to

the information goal should be very easy for the end user.

Add any icons or other landmarks that you could or did use to reach your information objective in the appropriate box. How does this add to the appearance of the flow chart?

e)



Answer: As with landmarks in the physical world, we can help end users of Web sites to locate their information goals with clear and obvious navigational aids. We can also provide appropriate icons, graphics, and information to help identify what information presentations they are currently seeing and how to access other types of information and interaction.

Lab 4.1 Self-Review Questions

In order to test your progress, you should be able to answer

the following questions:

An Internet communications presentation can be described

1. _____ Using a road directions analogy

- 1)**
- _____ Using a flow chart to document and design interactions
 - _____ By reverse engineering an existing Web site
 - _____ All of the above

Road directions are given from the perspective of the person giving the directions.

2)

1. _____ **True**

- _____ **False**

A highway exit is similar to

1. _____ **A fork in the road**

- _____ **An communications goal**

3)

- _____ **A link from an index page for an audience to reach a goal**

- _____ **A Web-based transaction system**

A communications goal is similar to

1. _____ **A link to a subgroup of information**

4)

- _____ A sought physical location
- _____ A search engine
- _____ A Web site address

When mapping a presentation, the following are useful:

1. _____ Flow charts

- _____ Arrows directing the end user's movements

5)

- _____ Documenting the information presentations and exchanges
- _____ None of these

- _____ All of these

Building a successful communications effort requires

1. _____ A lot of cool graphics

- _____ As many Web pages as 6) possible
- _____ The use of many clever ideas
- _____ Delivery of audience communication goals

Lab 4.2: Determining and Mapping Information Exchanges and Presentations



Lab Objectives

After this lab, you will be able to

- [Catalog Current Successful Communications](#)
- [Map Current Communications](#)
- [Convert Traditional Information Exchanges to Internet Exchanges](#)

Moving forward in Internet communication construction, we can begin to build new communications systems using the mapping concepts from the

previous lab. Again, this process must include the audience involved and the communications goal of that audience.

An excellent tool for many Web communicators is to catalog and map current successful communications. A flow chart can be used for each audience. This process involves documenting each interaction with a customer or audience member.

The information exchange that takes place is included in each

box of a flow chart.

Informational content is included as the subject matter involved in each exchange.

Captured or supplied information, such as customer contact information or product details, should also be included in this cataloging process.

Communications techniques, including phone, fax, mail, etc., that are utilized in each interchange should also be documented in the appropriate part of the flow chart or map.

Once this is completed for every step in a communications

model, communications goals can be determined for each audience involved. These communications goals serve as the final box in a mapped communication effort.

This mapping of current efforts is then used to develop communications efforts, ideas, and solutions that shift traditional communication efforts communication onto the Internet. Internet technology can be applied to specific situations to build Internet communications systems that replicate traditional media

efforts and fulfill audience goals.

Lab 4.2 Exercises

4.2.1 Catalog Current Successful Communications

Refer to this scenario from the Webmaster Certificate Program at Merrimack College when answering the following questions.

One of the audiences that we communicate with regularly in the operation of the Webmaster Certificate Program at Merrimack College is prospective students who are responding to a referral or other type of advertising about the program. They are interested in the program when they contact us by phone or e-mail. They usually communicate with us in three separate communications using the same methods. The objective of our information exchanges is a class

registration based on their needs.

The first time they contact us they are interested in general information. The most prevalent questions pertain to costs, class meeting formats, length of commitment to receive a certificate, and what skills are taught. After capturing their contact information we forward a catalog and schedule of classes by mail.

Once this information is in our database, we forward regular

mailings of new schedules and class information. If we do not hear from a prospective student again, we try to follow up with a phone call after a reasonable amount of time, usually 2-3 weeks.

When we do hear from students again, the second interaction usually involves academic advising. Students ask specific questions about what classes they should take. Answers are given based on their education goals and existing skill sets.

Next, a student moves forward in the cycle and registers for a class. This happens two ways in our program. Many students register over the phone by updating any incomplete contact information, supplying a social security number, and paying tuition using a credit card. Some students register using a tuition extension model that involves a contractual commitment. Normally students request the appropriate form, which is specific for each course, and receive the form by fax. They

then return the completed form to complete the transaction. A confirmation letter is forwarded via mail after the registration is completed.

- a) Who is the audience involved in this communications cycle?
- b) What information is captured in the first interaction with prospective students?
- c) What are the questions and answers in the first interaction?
- d) What are the vehicles for the first information exchange?

What communication may take place
e) between the first and second
interaction?

f) What is the content exchanged in the
second interaction?

g) What are the vehicles for this
exchange?

h) What is the content exchanged in the
third interaction?

i) What are the vehicles for this
interaction?

What is the final outcome of this

j) interaction?

k) What is the last communication?

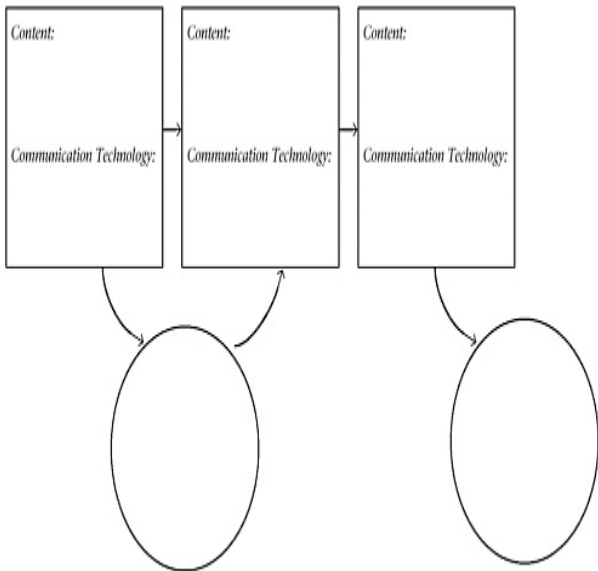
4.2.2 Map Current Communications

Referring to the previous lab, which discussed mapping of information presentations, build a map of the information described in [Exercise 4.2.1](#) using traditional media. Utilize the flow chart and the

information from the previous exercise to complete this exercise.

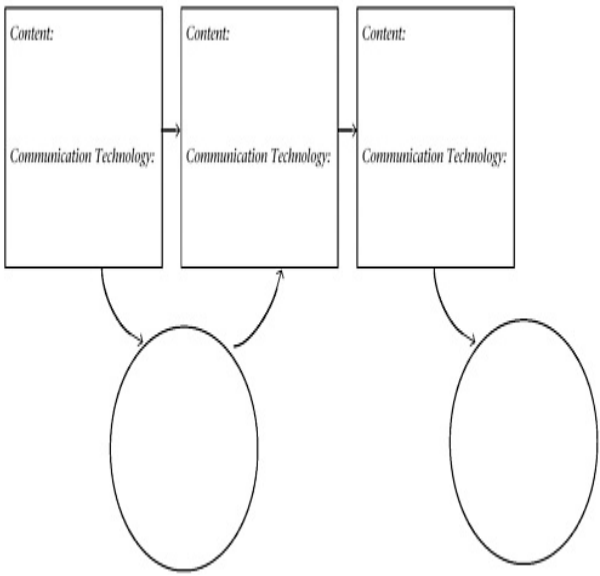
What is the audience of this information

Audience: _____



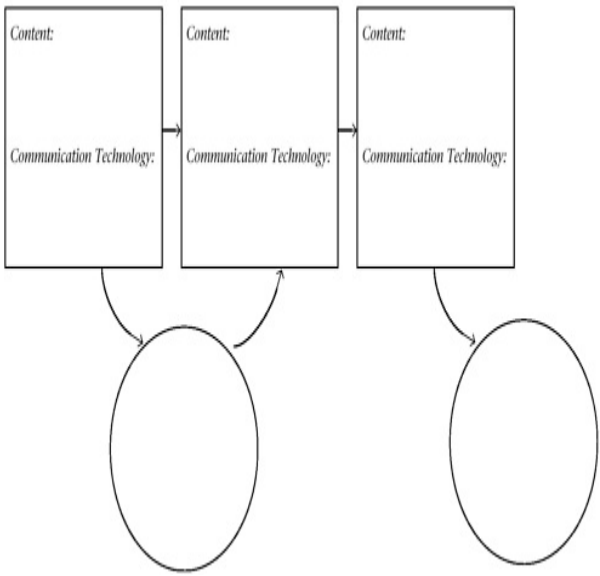
Based on the first exchange in the previous content in the first box of this diagram?

b)



What are the communication technologi

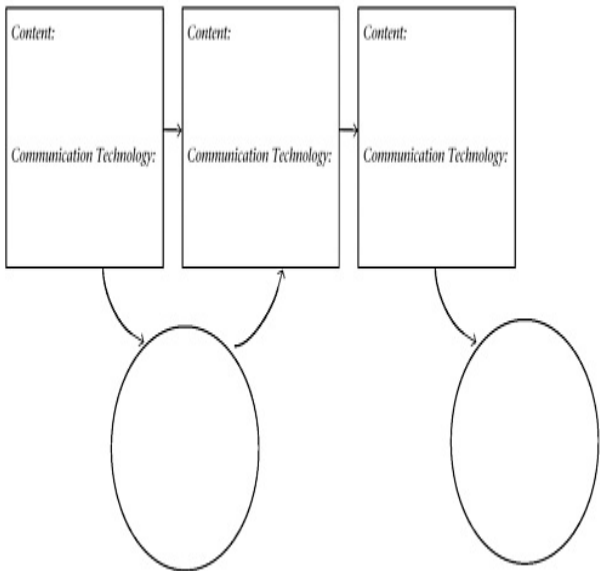
c)



What communications activity could be in the first box?

Audience: _____

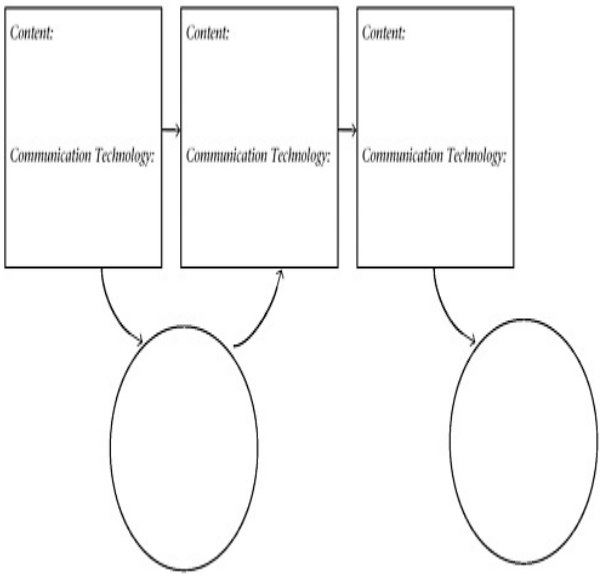
d)



Based on the second exchange in the pr
informational content of the second box

Audience: _____

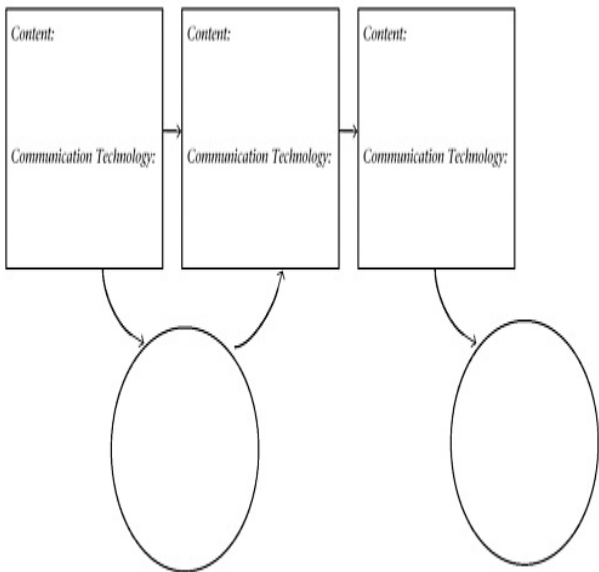
e)



What are the communications methods

Audience: _____

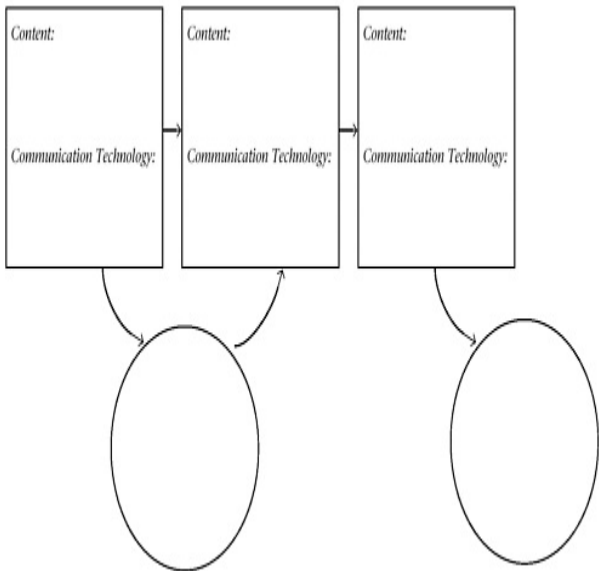
f)



Based on the third exchange in the previous informational content of the third box?

Audience: _____

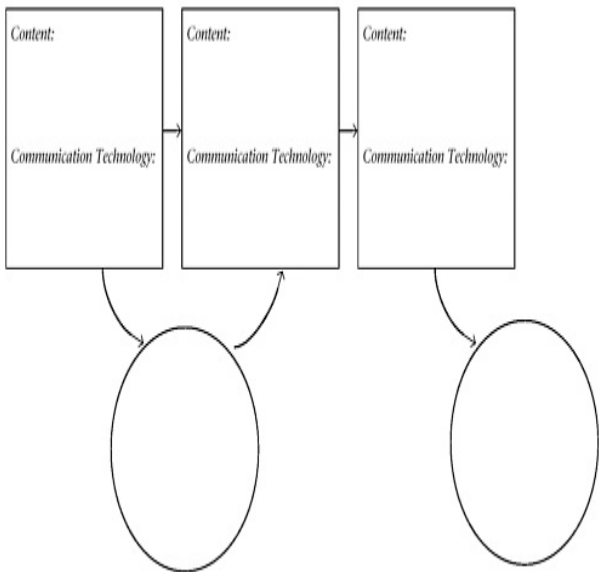
9)



What are the communications methods

Audience: _____

h)



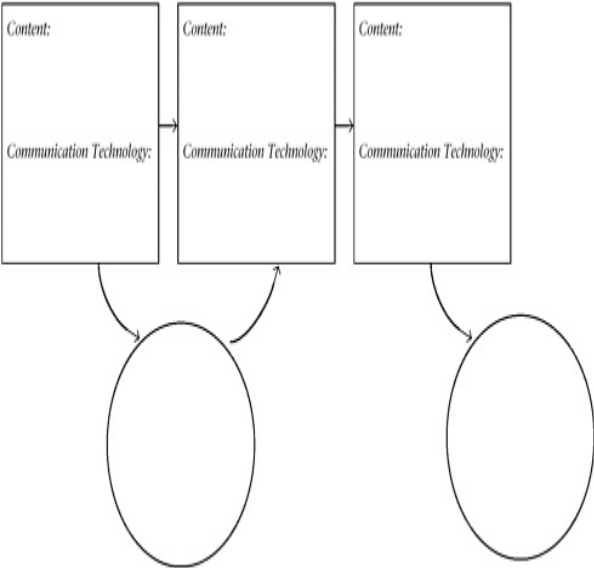
What is the purpose behind the last box'

i)

What communication could be included in box?

Audience: _____

d



4.2.3 Convert Traditional Information Exchanges to Internet Exchanges

- a)** What is the potential Web audience involved in this communications cycle?
- b)** How can the Internet be used to facilitate the first exchange?
- c)** How can the Internet be used to facilitate the smaller boxes in the map?

d) How can the Internet be used to facilitate the second exchange?

e) How can the Internet be used to facilitate the third exchange?

How can the Internet be used to
f) complete the overall goal of the interchanges?

Lab 4.2 Exercise Answers

4.2.1 Answers

Refer to this scenario from the Webmaster Certificate Program at Merrimack College when answering the following questions.

One of the audiences that we communicate with regularly in the operation of the Webmaster Certificate Program at Merrimack College is prospective students who are responding to a referral or other type of advertising about the program. They are interested in the program when they contact us by phone or e-mail. They usually

communicate with us in three separate communications using the same methods. The objective of our information exchanges is a class registration based on their needs.

The first time they contact us they are interested in general information. The most prevalent questions pertain to costs, class meeting formats, length of commitment to receive a certificate, and what skills are taught. After capturing their contact information we forward a

catalog and schedule of classes by mail.

Once this information is in our database, we forward regular mailings of new schedules and class information. If we do not hear from a prospective student again, we try to follow up with a phone call after a reasonable time, usually 2-3 weeks.

When we do hear from students again, the second interaction usually involves academic advising. Students ask specific questions about

what classes they should take. Answers are given based on their education goals and existing skill sets.

Next, a student moves forward in the cycle and registers for a class. This happens two ways in our program. Many students register over the phone by updating any incomplete contact information, supplying a social security number, and paying tuition using a credit card. Some students register using a tuition extension model that involves a contractual commitment. Normally

students request the appropriate form, which is specific for each course, and receive the form by fax. They then return the completed form to complete the transaction. In both methods, a confirmation letter is forwarded via mail after the registration is completed.

a) Who is the audience involved in this communications cycle?

The audience in this communications example is prospective students for the
Answer: *Webmaster Certificate Program*

responding to a marketing program.

- b)** What information is captured in the first interaction with prospective students?

Answer: *Contact information is captured.*

- c)** What are the questions and answers in the first interaction?

Questions and answers include costs, class meeting formats,

Answer: *length of commitment to receive a certificate, and what skills are taught.*

d) What are the vehicles for the first information exchange?

The vehicles for information exchange are phone and e-mail for direct communication and traditional mail for hard copy fulfillment of catalog and schedule materials.

Answer:

What communication may take
e) place between the first and second interaction?

If a prospective student responds to a marketing effort but does not contact us again, we follow up with a phone call.

Answer:

What is the content exchanged

f) in the second interaction?

The second interaction involves academic advising based on the student's situation, goals, and current skill sets.

Answer:

g) What are the vehicles for this exchange?

Answer: *The vehicles for this exchange are phone and e-mail.*

h) What is the content exchanged in the third interaction?

The third interaction involves

course registrations.

Interactions include either

Answer:

capturing contact, course selection, and payment information or the exchange of a registration and tuition extension form.

i)

What are the vehicles for this interaction?

The vehicles for this

Answer:

communication are situational and include phone, e-mail, fax, and mail.

i)

What is the final outcome of this interaction?

Answer: *The final outcome of this interaction is a completed course registration.*

k) What is the last communication?

The last communication in this cycle is the forwarding of a

Answer: *confirmation letter to the student via mail based on the outcome of the registration.*

4.2.2 Answers

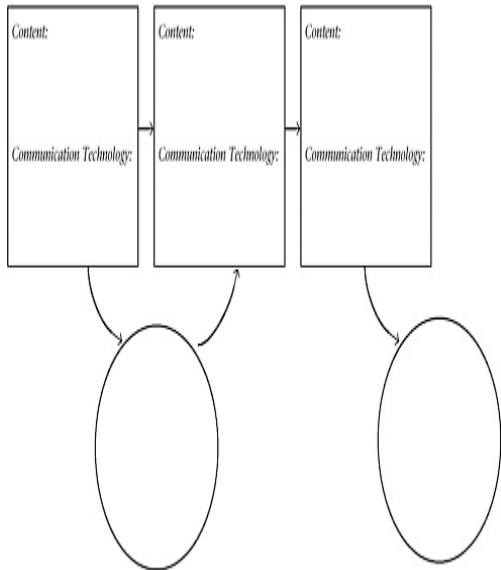
Referring to the previous lab,

which discussed mapping of information presentations, build a map of the information described in [Exercise 4.2.1](#) using traditional media. Utilize the flow chart and the information from the previous lab to complete this exercise.

What is the audience of this inform

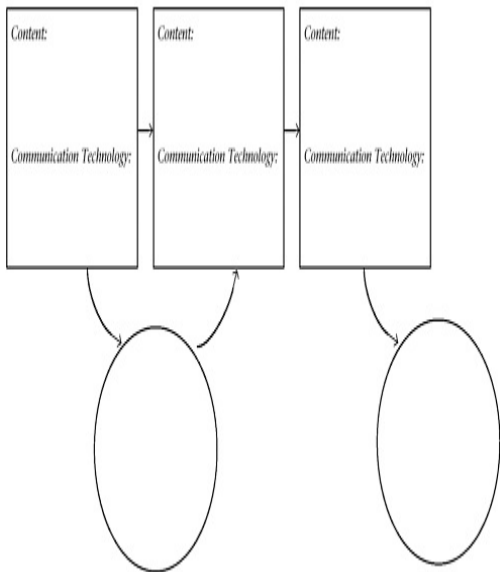
Audience: _____

a)



Prospective students can be adde

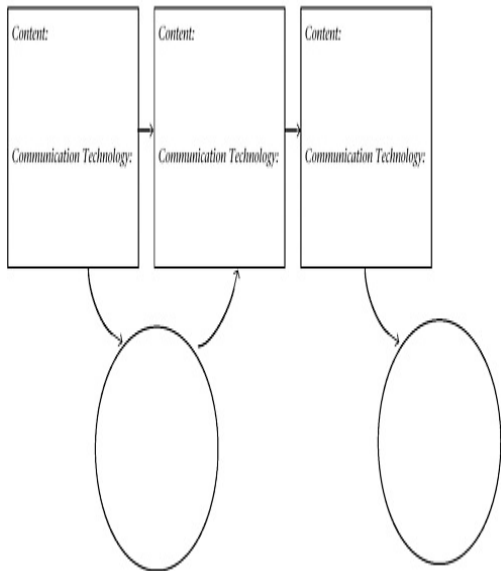
Answer:



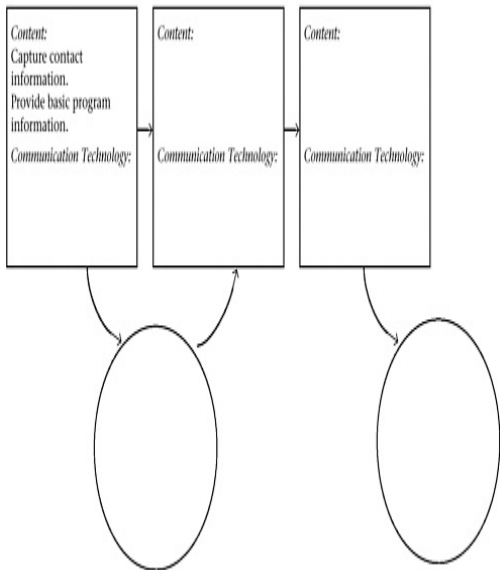
Based on the first exchange in the
content in the first box of this diagram

b)

Audience: _____

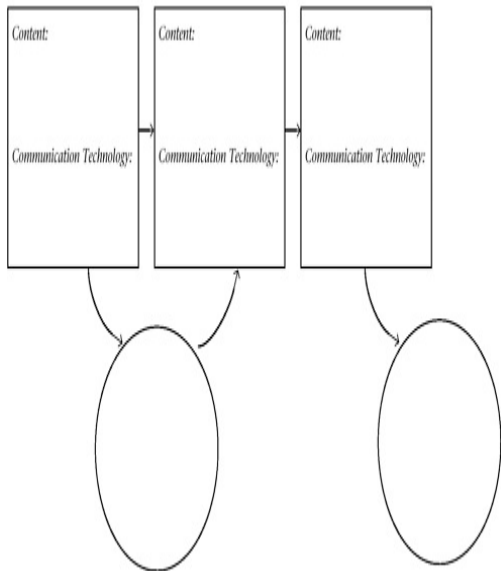


*Contact information is captured. i
basic information answering prev.
meeting formats, length of comm
skills are taught.*



What are the communication tech

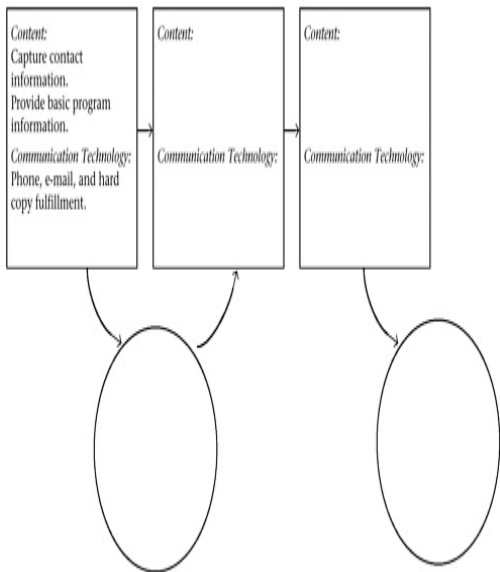
Audience: _____



Currently, this communication is a fulfillment of catalogs and scheduled

Answer:

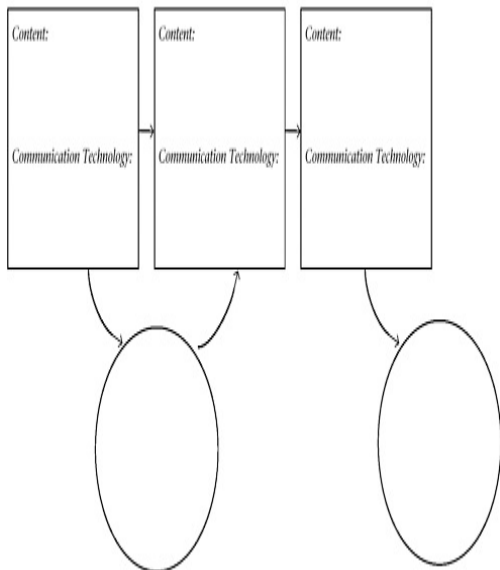
Audience: Prospective students



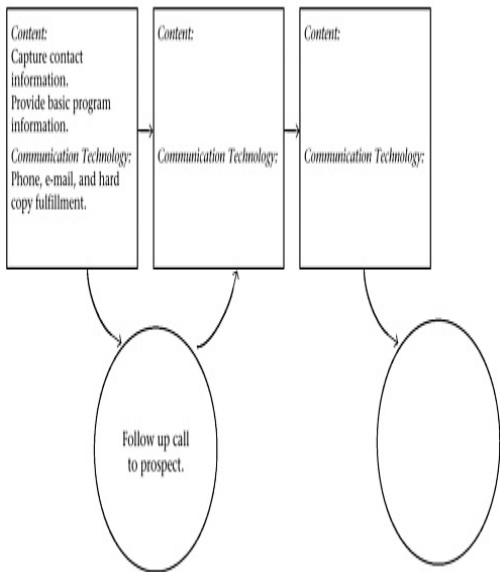
What communications activity do the first box?

Audience: _____

d)

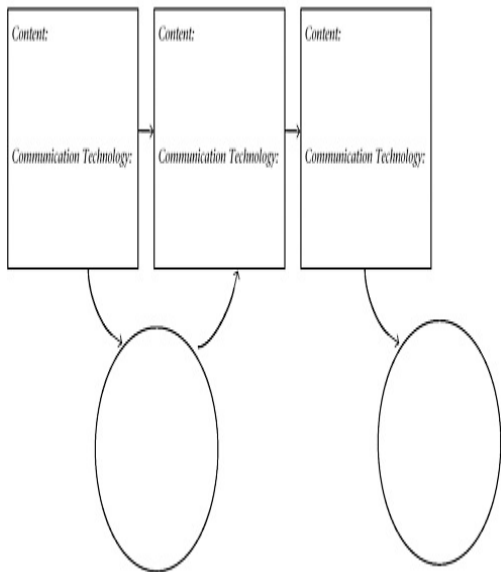


Answer:



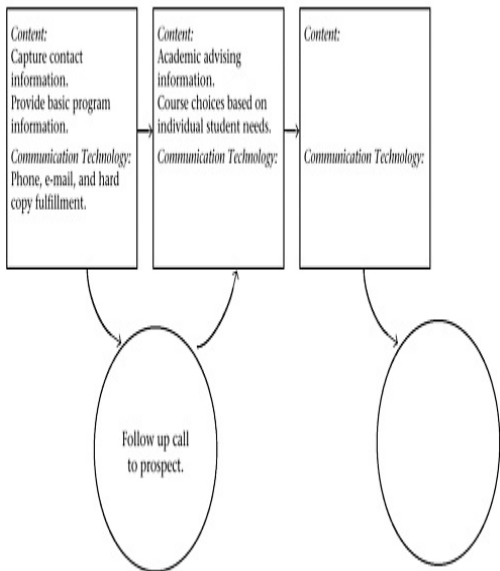
Based on the second exchange in informational content of the seco

e)



The second box includes academic choices based on student needs and

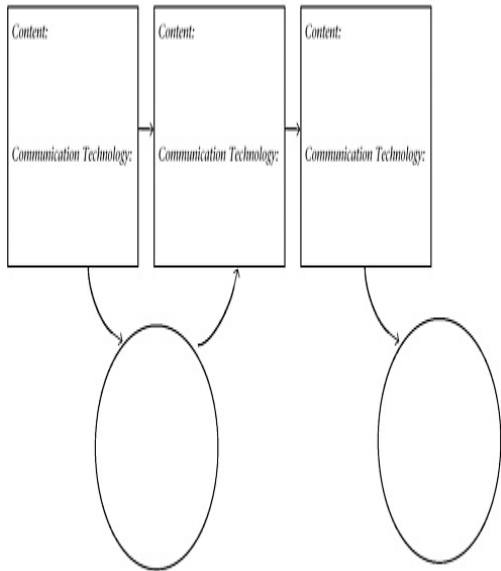
Answer:



What are the communications me

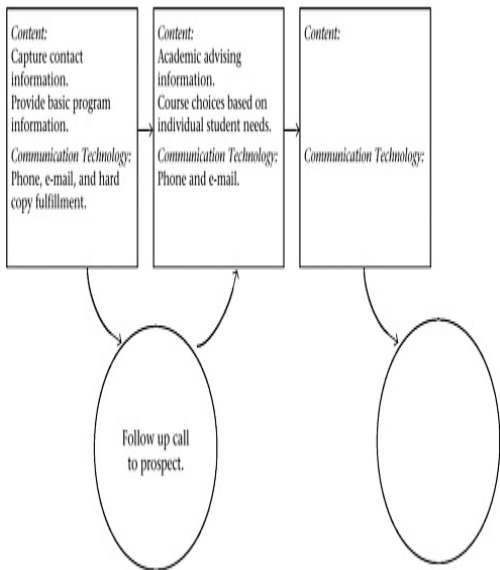
Audience: _____

f)



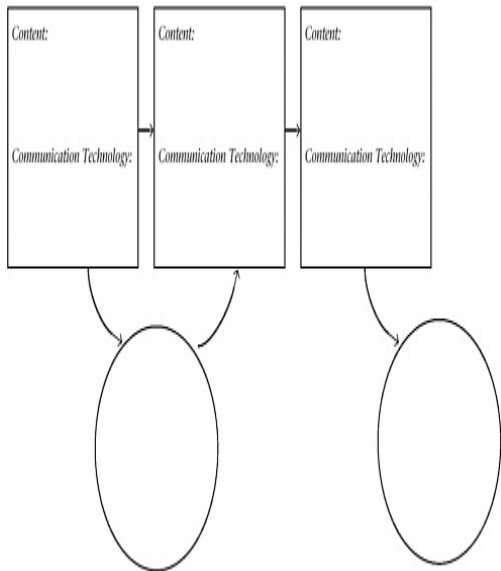
The communications methods used

Answer:



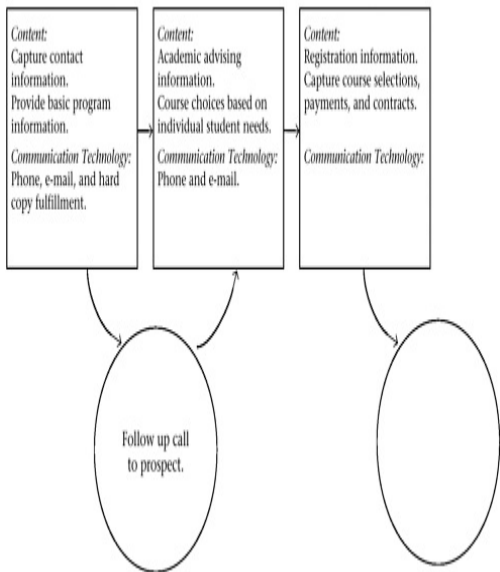
Based on the third exchange in the informational content of the third

Audience: _____



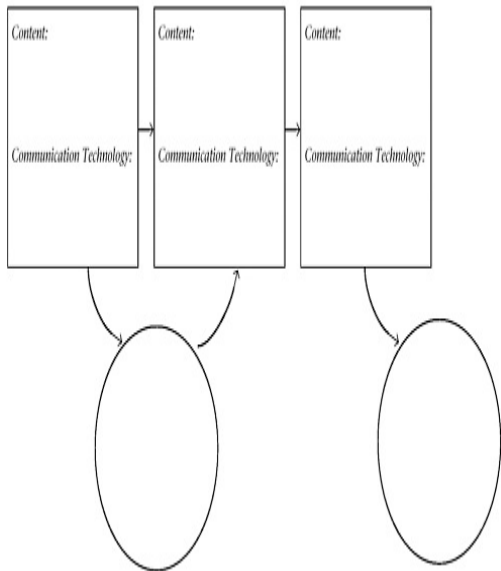
The third box involves registration completed, including course selection agreements.

Answer:



What are the communications me

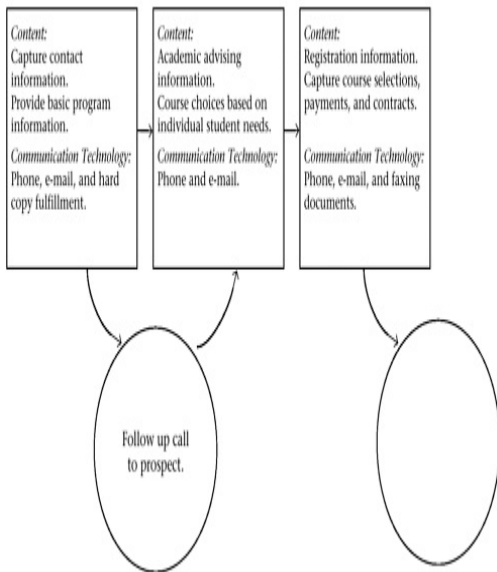
Audience: _____



This process involves phone, e-m

Answer:

Audience: Prospective students



What is the purpose behind the la

i)

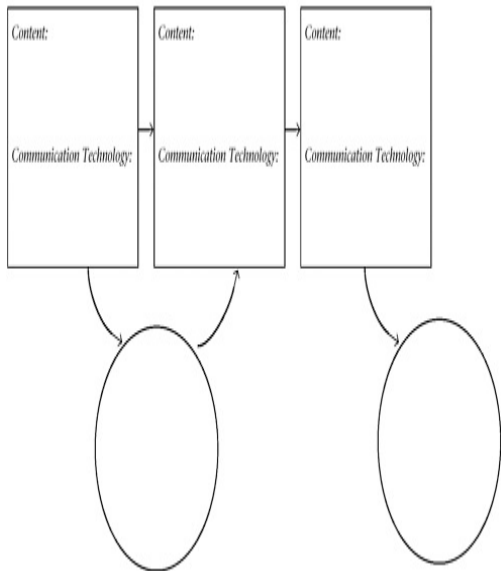
The purpose behind the last inter

Answer: *complete student registrations.*

What communication could be inc
box?

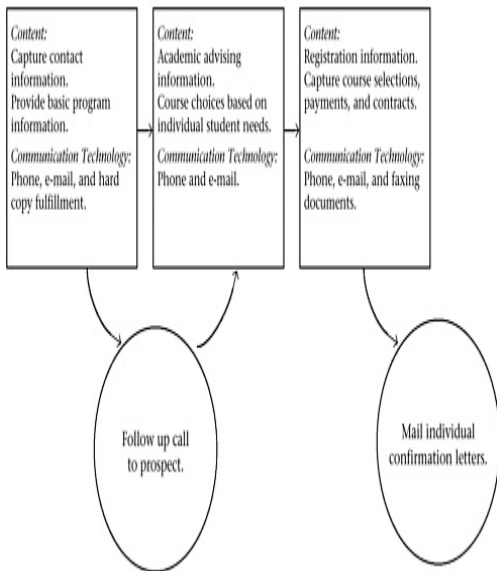
i)

Audience: _____



The forwarding of individual confi

Answer:



4.2.3 Answers

What is the potential Web
a) audience involved in this
communications cycle?

*Any prospective student who
also has Internet access, which
is likely.*

Answer:

b) How can the Internet be used to
facilitate the first exchange?

*The first exchange involves
information capture and
presentation. Both can be
accomplished over the Internet.*

A form can be utilized to capture
contact information in the
student database. Course

Answer:

catalogs, schedules, and information answering the prevalent questions can be presented in text or graphic formats.

How can the Internet be used to
c) facilitate the smaller boxes in the map?

In both situations, e-mail can be substituted for the communication. A follow-up e-mail could be automatically generated based on the time involved. A course confirmation can be created and forwarded via e-mail, replacing the hard copy version now created by the database and forwarded via mail.

Answer:

d) How can the Internet be used to facilitate the second exchange?

A Web presentation could be designed to present academic advising information and course recommendations based on current skill levels and goals.

Answer: A static system with scenarios could be presented or a question and answer format could be presented utilizing forms and a database. E-mail could also be used for individual attention.

e) How can the Internet be used to facilitate the third exchange?

The third exchange could be accomplished via the Web using forms and the student database, similar to the transaction model from amazon.com. If a contract is needed, a Web page could be used for authorization and be printable for student records. A downloadable or printable page that could be returned by fax could be used as well.

Answer:

f) How can the Internet be used to complete the overall goal of the interchanges?

The goal of the interchange is to complete registration

Answer:

transactions, and these can be facilitated and completed using

Lab 4.2 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

An excellent tool for developing Web site architecture is

1. _____ **A cool-looking home page**

1) • _____ A flow chart documenting

current communication activities

- _____ A strategic plan for incorporating partnerships
- _____ A mandate from upper management on company structure

The communications goal of the audience member is not included in the mapping process.

2)

1. _____ True

- _____ False

Mapping current communications efforts should include

1. _____ Audiences involved

- _____ Informational content involved in each interchange
- _____ Communications methods used
- _____ All of these

Mapping current efforts can lead to

1. _____ Flow charts of information exchanges

- _____ Development of audience communications goals
- _____ A process to shift communication to Internet methods
- _____ All of these

Internet communication can replace

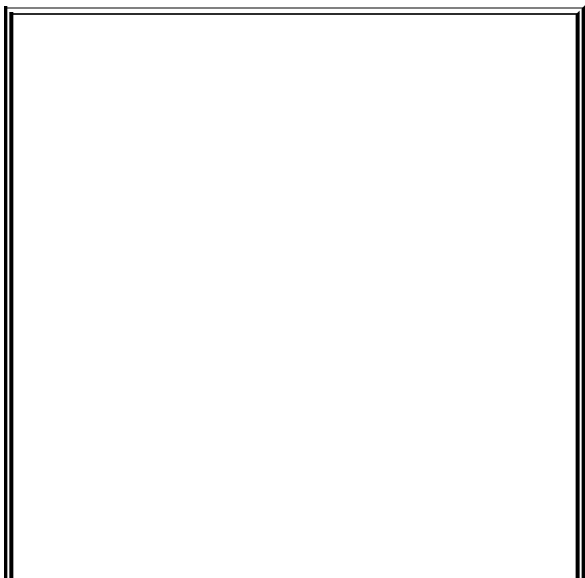
1. _____ Hard copy fulfillment of materials

- _____ Traditional letters

5)

- _____ Informational presentations
- _____ Traditional transaction processes like phone purchasing
- _____ All of these

Lab 4.3: Building Presentations Using Story Boards



Lab Objectives

After this lab, you will be able to

- [Put Audience Objectives First](#)
- [Create Story Boards](#)
- [Use Story Boards for Internet Presentations](#)

The next steps in building Internet communications efforts after mapping current activities include two major parts. The first activity utilizes a planning device to make sure

that audience communication goals are the most significant part of any Web site or other effort. The second activity involves the development of actual story boards of the Web presentation involved.

When pulling together the architecture of a Web site, it is useful to refer to the four major aspects of the audience being targeted with Web communication:

Who the identification of the audience members

What the information they are seeking

Why the communications objective of the audience member, which may be defined as information but also could be a transaction of some kind

How the communications technologies being utilized to complete the exchange

These audience-targeting concepts should be well defined and documented when building a Web site to meet audience

needs. Every step in the development of Web communications should continue to recognize audience goals. They are the primary purpose of building the presentation. A useful planning device is to design the presentation by starting at the audience goal and working backward to the beginning of the interchange. This way, the goal comes first and the rest of the presentation is built to facilitate this goal.

Looking back at the flow charts from the previous exercises, an

easy way to demonstrate this concept is to reverse the arrows on the charts, especially that in [Exercise 4.1.4](#).

Reversing the flow of the information exchange puts the goal first and the index page last in the flow chart.

Building Web architecture can also utilize a concept from the film industry, story boards.

Story boards are used to develop visual scenes in movies and other presentations.

Directors draw a series of pictures to tell a story and then shoot film that re-creates this

story. This process is also used in multimedia presentations. A modified version using flow charts to design Web presentations is discussed here. Some Web developers also create visual representations of Web pages to further define the presentations while building a site.

These story boards are titled with the audience they are designed to reach and contain three significant elements:

Informational content of

each exchange with the audience members

Communications technologies involved

Navigational aids involved

Additional elements, such as e-mail interactions, should also be included when appropriate. Navigational elements involve icons and links that help the end users reach their communication goals easily and move around the presentation to reach other information. Like

landmarks and street signs, navigational aides should be developed from the audience perspective.

Lab 4.3 Exercises

4.3.1 Put Audience Objectives First

Let's revisit targeting audience communication objectives to begin the process of constructing a Web site.

Answer the following questions in regard to your favorite Web sites.

a) What audience are you a member of when you visit this site?

b) What specific information are you seeking?

c) What outcome are you looking for in this communication?

d) How is the information presented?

e) What, therefore, is the primary purpose of this section of your favorite Web

site?

Where should you begin when
f) constructing an Internet
communications effort?

4.3.2 Create Story Boards

To demonstrate how Web sites and Internet interactions can be constructed from the objective of the audience members, reverse engineer the flow chart from [Exercise 4.1.4](#),

depicting your visit to your favorite Web site. Use the following grid to build story boards of the Web site by including the information objectives, the presentations you saw, the ways that the information was presented, and the navigation options available. *Hint:* Reverse the arrows on the flow chart and start in the bottom right corner.

Audience: _____

Information
Content:
Presentation
Technology:
Navigational
Elements:

--

--

--

--

--

Information
Content:
Presentation
Technology:
Navigational
Elements:

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a) Who is the audience targeted by this presentation?

b) What information is now in the first box in the flow chart?

What presentation technology was

c) involved?

d) What navigational elements were present?

e) What appears in the last box in the flow chart?

f) What navigational elements were present? (You don't need to list every one here but may want to in an actual construction situation.)

g) What presentation technology was involved?

h) What are the steps in between?

What presentation technologies were involved at each step?

What navigational elements were present at each step?

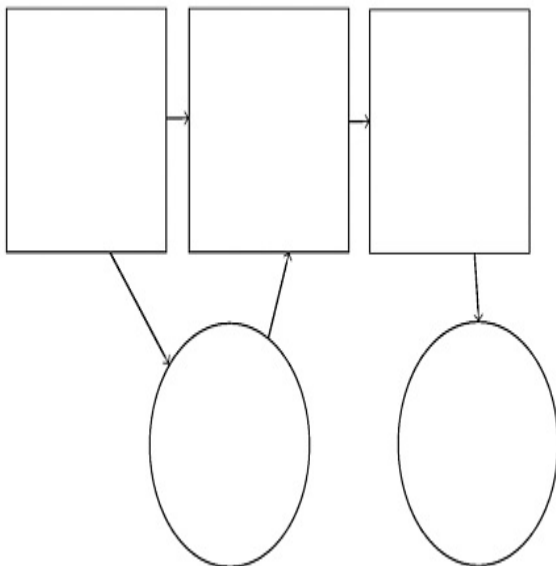
4.3.3 Use Story Boards for Internet Presentation Architecture

Create a Web site story board of the information interchanges from the previous lab. Suggest

possible information exchange technologies and navigational options.

Audience: _____

Information
Content:
Presentation
Technology:
Navigational
Elements:



- a)** Who is the audience targeted by this presentation?
- b)** What information content should be listed in the first box?
- c)** What communication technologies should be listed in the first box?
- d)** What navigational elements could be listed in the first box?
- e)** What about the smaller circles?
- f)** What information content should be listed in the second box?

- g) What presentation technologies should be listed in the second box?
- h) What navigational elements could be listed in the second box?
- i) What information content should be listed in the third box?
- j) What presentation technologies should be listed in the third box?
- k) What navigational elements could be listed in the third box?

Lab 4.3 Exercise Answers

4.3.1 Answers

Let's revisit targeting audience communication objectives to begin the process of constructing a Web site.

Answer the following questions in regard to your favorite Web sites.

What audience are you a
a) member of when you visit this site?

Your answer will vary. I am a member of the general Internet

audience interested in updated weather information.

Answer:

This was explained as the *who* in [Chapter 2](#). The audience is always the first issue in building Internet communications systems.

b) What specific information are you seeking?

Your answer will probably be different. Mine is the immediate and extended weather forecast for my physical location.

Answer:

This was discussed as the *what* in [Chapter 2](#) the information that fulfills the audience's wants, needs, and desires.

What outcome are you looking
c) for in this communication?

My outcome is to receive the information I am seeking. This is my communication goal. Your outcome may be information as well or it may be a transaction of some kind.

Answer: This communication goal was explained as the *why* in [Chapter 2](#). The outcome may be informational, which is the case in this example. Or the outcome may be a transaction, as it was in the previous lab. Either way, this goal must be considered when building Internet communications efforts.

d) How is the information presented?

Your answer will depend on the Web site involved. In my situation, the information is presented by a database using text, graphics of weather maps, and a small video file showing maps with moving weather

Answer: *patterns.*

This answer documents how the information was presented. Determining information presentation to serve the audience goals is another vital part of this process.

What, therefore, is the primary purpose of this section of your favorite Web site?

e)

Your answer will be based on your communication goal. In my case the primary purpose for this section of the cnn.com site is to deliver pertinent weather information.

Answer:

Our objective in creating effective Web and Internet communication systems is to deliver the information sought by the audience as quickly and as easily as possible.

f) Where should you begin when constructing an Internet communications effort?

The construction of an Internet

communications effort should begin at the point where information or other goals are delivered to the audience that seeks them.

Everything else in a Web site or other type of effort should be geared toward facilitating this goal. This involves building efficient and effective delivery mechanisms and presentations that provide the information goals for the audiences involved. An excellent way to begin building Web site presentations is first to determine the who, what, why, and how of the information exchanges and then work outward from these goals using story boards.

Answer:

4.3.2 Answers

To demonstrate how Web sites and Internet interactions can be constructed from the objective of the audience members, reverse engineer the flow chart from [Exercise 4.1.4](#), depicting your visit to your favorite Web site. Use the following grid to build story boards of the Web site by including the information objectives, the presentations you saw, the ways that the information was presented, and

the navigation options available. *Hint:* Reverse the arrows on the flow chart and start in the bottom right corner.

- a)** Who is the audience targeted by this presentation?

Individual Internet users, like myself, who seek weather information for their specific location.

Answer:

Audience: Local weather seekers

Information
Content:
Presentation
Technology:
Navigational
Elements:

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Information
Content:
Presentation
Technology:
Navigational
Elements:

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b) What information is now in the first box in the flow chart?

Weather information based on my geography.

Answer:

Information
Content:
Presentation
Technology:
Navigational
Elements:

Local weather
information.

Information
Content:
Presentation
Technology:
Navigational
Elements:

c)

What presentation technology was involved?

A Web page presenting text, graphics, and video culled from a database of information.

Audience: Local weather seekers

Information
Content: Local weather information.
Presentation
Technology: Web page w/text, graphics, video, and database interface.
Navigational
Elements:

Information
Content:
Presentation
Technology:
Navigational
Elements:

Answer:

d) What navigational elements were present?

*Your answer will vary from mine.
On the cnn.com site icons and links to other information*

involved with weather were prevalent as well as links to other topics on the site.

Audience: Local weather seekers

Information
Content:

Local weather
information.

Presentation
Technology:

Web page w/text,
graphics, video, and
database interface.

Navigational
Elements:

Site icons, links to
other weather sites
and other topics.

Answer:

Information
Content:

Presentation
Technology:

Navigational
Elements:

A variety of links were available to other information topics on the site, and a consistent graphic appears on each page presented by the site. Sometimes called a navigation bar, this type of navigational tool is used on

many Web sites.

e) What appears in the last box in the flow chart?

Your answer should be the home page of your favorite site. Mine is the index page for cnn.com

Audience: Local weather seekers

Information
Content:

Local weather
information.

Presentation
Technology:

Web page w/text,
graphics, video, and
database interface.

Navigational
Elements:

Site icons, links to
other weather sites
and other topics.

Information
Content:

Presentation
Technology:

Navigational
Elements:

cnn.com
Index page

Answer:

f) What navigational elements were present? (You don't need to list every one here but may want to in an actual construction situation.)

Your answers will vary. On the cnn.com the navigation bar appears on the first page.

Audience: Local weather seekers

Information Content: Local weather information.
Presentation Technology: Web page w/text, graphics, video, and database interface.
Navigational Elements: Site icons, links to other weather sites and other topics.

Answer:

Information Content:
Presentation Technology:
Navigational Elements:

cnn.com
Index page

Navigation bar.
Many, many internal links,

g) What presentation technology was involved?

The presentation was conducted using a Web page carrying graphics and a form for a search engine.

Audience: Local weather seekers

Information
Content:

Local weather
information.

Presentation
Technology:

Web page w/text,
graphics, video, and
database interface.

Navigational
Elements:

Site icons, links to
other weather sites
and other topics.

Answer:

Information
Content:

Presentation
Technology:

Navigational
Elements:

cnn.com
Index page

Web page w/graphics
& forms,

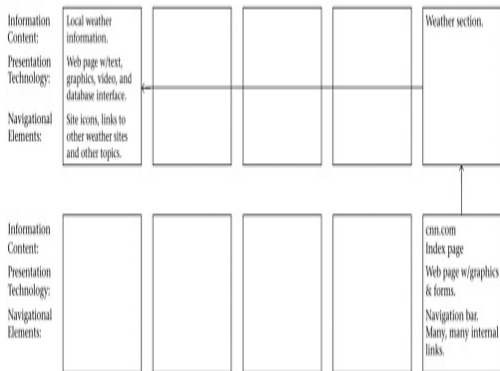
Navigation bar.
Many, many internal
links.

h) What are the steps in between?

Your answer will be based on your flow chart. My steps were very short, just one link to the weather section. A database query form on that page returned my communication goal.

Answer:

Audience: Local weather seekers



On my flow chart, the middle step was only one step. This is an example of a well-designed Web presentation as the information I sought was delivered to me in an extremely efficient manner.

d What presentation technologies were involved at each step?

The information presentation in the middle step was a Web page serving as an interface to a database on weather information.

Audience: Local weather seekers

Answer:

Information Content:	Local weather information.				Weather section.
Presentation Technology:	Web page w/text, graphics, video, and database interface.				Web page w/ database interface.
Navigational Elements:	Site icons, links to other weather sites and other topics.				
Information Content:					cnn.com
Presentation Technology:					Index page
Navigational Elements:					Web page w/graphics & forms. Navigation bar. Many, many internal links.

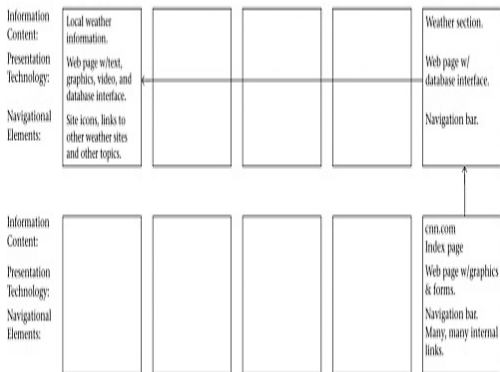
d

What navigational elements were present at each step?

Your answer will be based on your Web site. In mine, the navigation bar was present on every presentation.

Audience: Local weather seekers

Answer:



This flow chart is now serving as a story board of this information exchange. Information, presentation technologies, and

navigational information are present for each page in this presentation.

4.3.3 Answers

Create a Web site story board of the information interchanges from the previous lab. Suggest possible information exchange technologies and navigational options.

Who is the audience targeted by

a) this presentation?

The audience is prospective students.

Answer:

Audience: Prospective students

Information

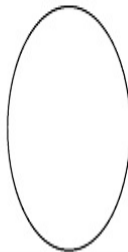
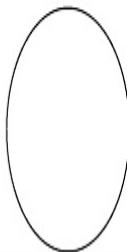
Content:

Presentation

Technology:

Navigational

Elements:



b) What information content should be listed in the first box?

The capture of a course registration is the communication goal of this audience. Captured information should include course, contact, and payment information. An option for contractual agreements must also be present.

Answer:

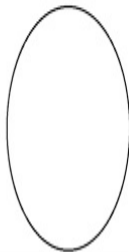
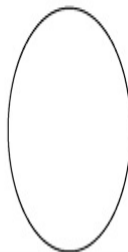
Audience: Prospective students

Information
Content:

Capture course registrations,
payments, and contracts.

Presentation
Technology:

Navigational
Elements:



What communication
c) technologies should be listed in
the first box?

A Web page carrying a form to capture the appropriate information and interact with the student database.

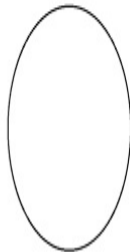
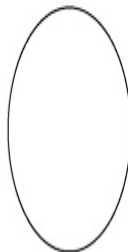
Answer:

Audience: Prospective students

Information
Content:
Presentation
Technology:
Navigational
Elements:

Capture course registrations,
payments, and contracts.

Web page w/form to inter-
face w/student database.



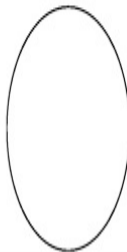
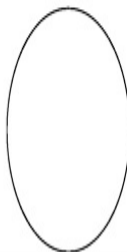
d) What navigational elements
could be listed in the first box?

A navigation bar leading to other areas of the Web site could be involved. Links to other areas pertinent for this audience, especially back to the previous (or next in this flow chart) presentation providing academic advising information, should also be prevalent.

Answer:

Audience: Prospective students

Information
Content: Capture course registrations,
payments, and contracts.
Presentation
Technology: Web page w/form to inter-
face w/student database.
Navigational
Elements: Navigation bar and
relevant links for this
audience.



e) What about the smaller circles?

These circles should include e-mail confirmation in the first and e-mail prospect follow-up in the second.

Audience: Prospective students

Information

Capture course registrations, payments, and contracts.

Content:

Presentation

Web page w/form to interface w/student database.

Technology:

Navigational

Navigation bar and relevant links for this audience.

Elements:

Answer:

E-mail confirmation.

E-mail follow up to prospects.

f) What information content should be listed in the second box?

This information presentation should explain course offerings based on audience members' needs and experience. A static presentation could utilize scenarios. A dynamic presentation could use questions and answers from a database.

Answer:

Information
Content:
Presentation
Technology:
Navigational
Elements:

Capture course registrations,
payments, and contracts.

Web page w/form to inter-
face w/student database.

Navigation bar and
relevant links for this
audience.

Audience-based course
offerings. Static/Dynamic



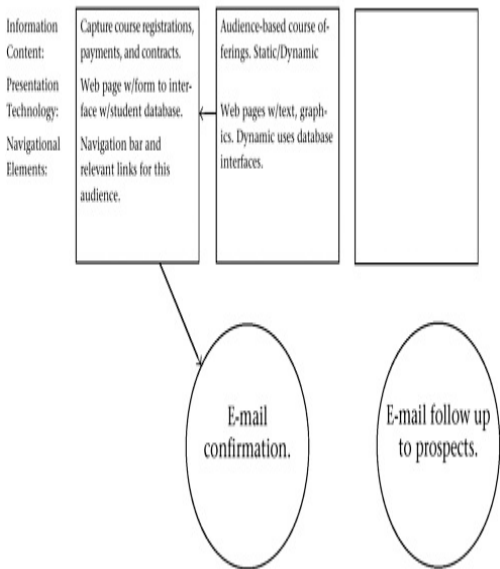
A line with an arrow pointing from the bottom of the first box to the top of the oval.

E-mail follow up
to prospects.

g) What presentation technologies
should be listed in the second
box?

Web pages will be used to present textual information. Graphics may be incorporated, and a database interface would be required for a dynamic presentation.

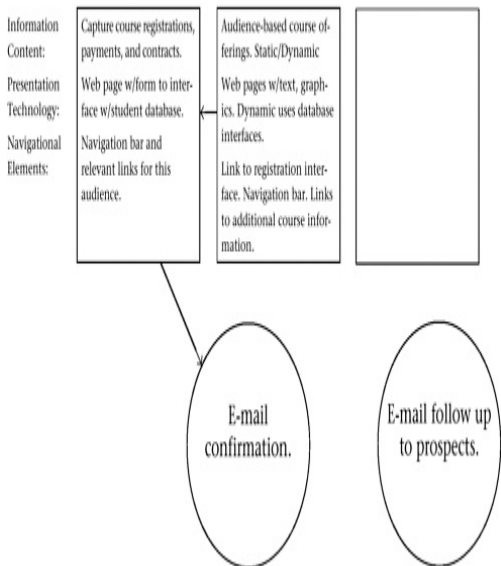
Answer:



What navigational elements
h) could be listed in the second box?

A navigation bar could be displayed for other sections of the Web site. A link to the registration presentation should be very significant. Links to additional information on the suggested courses are important.

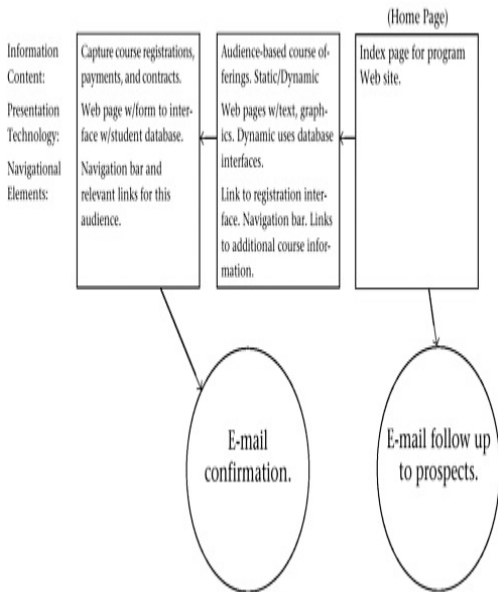
Answer:



d What information content should be listed in the third box?

The third box in this set of story boards should include the index page for the program Web site. This should include information and links targeted to any interested audience member.

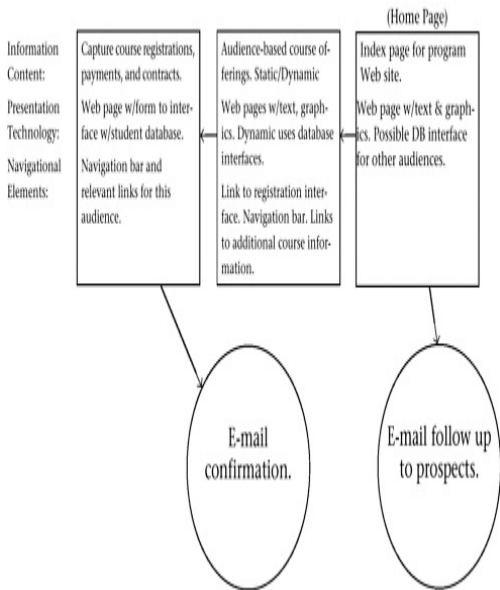
Answer:



i What presentation technologies should be listed in the third box?

A Web page with text and graphics will probably do the trick. Perhaps a database interface could be included to serve other audience needs as well.

Answer:

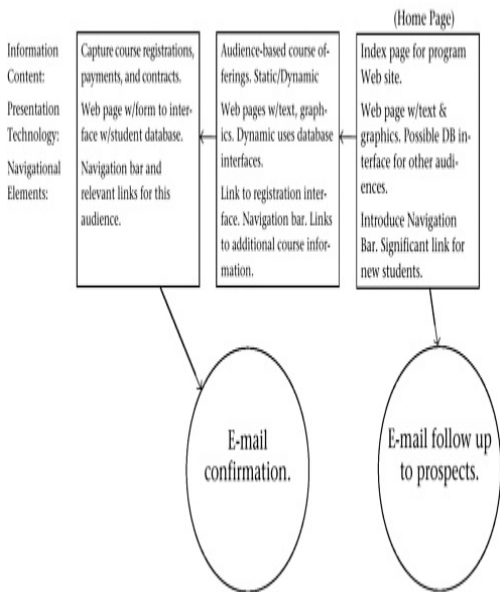


k) What navigational elements could be listed in the third box?

The navigation bar could be introduced. A significant link for new or prospective students would lead to the presentation described in the second box in this exercise.

Answer:

Audience: Prospective students



Navigational elements on the index page are very important because they are the exits off the Web site to present

audience-based information. Grouping information and determining appropriate navigational terms is further facilitated by this process of creating story boards from the communication objective back to the index page. It is significantly easier to decide where you need to go once you know where that is.

Lab 4.3 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

When building a Web site presentation, it is imperative first to

1. _____ Decide on logos and other graphics

1)

- _____ Define audience targeting elements
- _____ Establish hosting vendors
- _____ Determine navigational aides

Major audience targeting elements include

1. _____ Who the audience is

- _____ What information the audience seeks

2)

- _____ Why the audience is communicating
- _____ All of these
- _____ None of these

Reversing the traditional flow of information exchanges in the development process helps

1. _____ To confuse the management team involved

- 3)**
- _____ To justify development expenses
 - _____ To prioritize audience communication goals in the process

- _____ To clarify confusion in the IS department

Story boards should document

1. _____ Informational content of every interchange

- _____ Communications technologies of every interchange

4)

- _____ Navigational aids in every interchange
- _____ None of these
- _____ All of these

Navigational aids serve audiences by

facilitating access to information they seek.

5)

1. _____ **True**

● _____ **False**

Chapter 4: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

1) Who are your audiences?

2) What are the communications goals of your audiences (*what* and *why*)?

What are the information or content
3) areas of your story boards based on audience objectives?

4) What information will be presented at each information interchange?

What communications technologies will
5) be utilized to conduct these exchanges (*how*)?

6) What navigational aids will be added to your story boards and effort?

Chapter 5. Creative Strategies



It is always hard to go beyond your public. If they are satisfied with cheap performances, you will not easily arrive at better. If they know what is good, and require it, you will aspire and burn until you achieve it.

Ralph Waldo Emerson

Chapter Objectives

In this chapter, you will learn about

- ✓ [Identifying Creative Concepts](#)
- ✓ [Creative Evaluation](#)
- ✓ [Creative Development](#)
- ✓ [A WWW Critique Model](#)

In this chapter, we will continue to look at the actual development of Internet

communication efforts by primarily focusing on the creative presentation of information.

We have thoroughly discussed the development of information presentations and the necessity of targeting this content at appropriate audiences. This chapter deals with the presentation of this content what it should look like. Creative concepts support audience targeting by making information presentations appealing to their audiences. Like the content they provide,

creative presentations engage the end user.

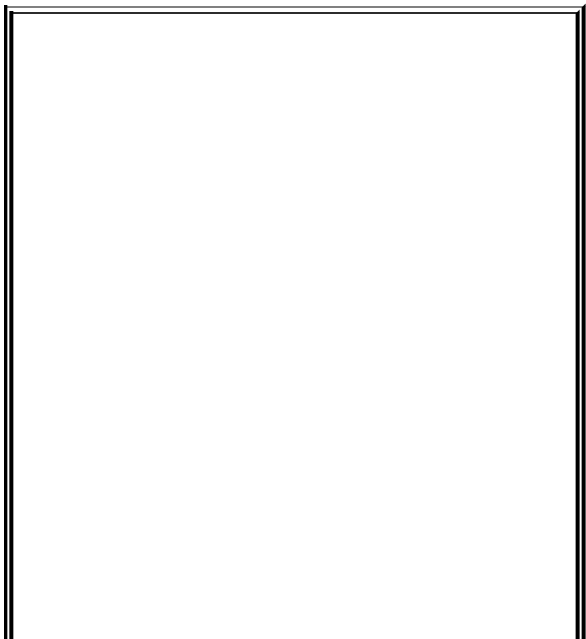
Our role as Webmasters may not involve the creative development of Web sites. This responsibility usually lies with more artsy people. But it's important to understand some general creative development concepts and terminology taken from traditional marketing methods. We will look at a set of Web sites to identify basic creative development concepts. These sites will also be visited to assess the use of creative elements and to critique Web

presentations. We will also briefly discuss creative development issues.

Multimedia elements, including sound, video, and animation, are not discussed in this chapter, though all could eventually be used in creative delivery of information. But the basic creative concepts discussed in the chapter are applicable to them as well. At the time of this book's publication, these media elements are becoming standardized but are not fully developed. Many of them are

not immediately available to all Web audience members. As Web usage increases, so will the use of these technologies. And the general concepts we discuss in this chapter will be useful in making those technologies part of Internet communication.

Lab 5.1: Identifying Creative Concepts



Lab Objectives

After this Lab, you will be able to

- [Understand Look, Feel, and the Big Idea](#)
- [Identify Audience Appeal and Engagement](#)
- [Identify Branding Activities](#)

Creative concepts involve the presentation of information. Web pages can be considered as blank pages. When building engaging communication systems, the content of the

information is the most important factor. But presenting these information exchanges in an appropriate manner is also important. Creative concepts are executed on these blank pages to make text, graphics, and other visual elements more appealing to the target audience involved.

Marketing people have been using the phrase "look and feel" to describe creative concepts for some time now. The look and feel of a presentation describes the appearance of a presentation

and the emotional response the presentation is aiming to trigger in the target audience.

Think about a TV advertisement for laundry detergent. The look of such an ad usually involves happy consumers in clean, tasteful, colorful surroundings. These ads make us feel comfortable, domestic, and happy about clean clothes. They inspire us to purchase these products with these looks and feelings. A creative development team did this on purpose.

Now think about the many TV advertisements for technology companies. They look modern, fast, high-tech, and usually include businesspeople or other people they are targeting. Technology companies are basically providing business solutions. Their advertisements usually try to make us feel as if they understand our problems, can solve our problems, and will make us happy and rich by doing so. Again, the look and feel of these ads was developed to appeal to the target audiences.

Identifying the look and feel of a presentation can be accomplished using adjectives. Descriptive terms can be used to explain the appearance and emotional involvement that a presentation is geared toward.

A single sentence, called a big idea or theme, can be used to identify the look and feel of a presentation. This single statement should represent the creative aspects of the presentation. It acts as a summary of the look and feel. Once developed, this theme can be used in the creative

process as a benchmark for every aspect of a presentation.

Engaging communication is the objective on the Web and in other media. For presentations to be engaging, they must appeal to the target audience. Creative elements such as color, text, and images must match the needs of the identified audiences.

Of course, knowledge about the target audience is needed to create presentations that will appeal to that audience. And each audience probably needs

information presented a certain way. Presentations for children will be designed differently than for adults. Serious information and subjects require a different approach than entertainment and lifestyle fulfillment. Text, images, and other media elements can all be used in different ways to engage the audience they are trying to reach.

Branding is another aspect of creative strategy that is very important in traditional advertising and now in

interactive communication. Branding describes the process of developing customer identification and recognition of products and companies over time. This is usually accomplished, in part, by utilizing consistent images, colors, and messages in multimedia advertising and promotion. TV, print, billboards, promotional items, signage, and interactive images all contain the same icons and creative presentations to build recognition among their audiences.

Large and small companies spend millions of dollars building brand recognition in the marketplace. For example, the Coca-Cola and Anhauser-Bush companies spend millions every year to keep their company and product brand names fresh in the consumer mind. Their brand-building activities are so successful that the color and logo for Coke™ and Budweiser™ beer is instantly recognized by millions of people around the world.

Internet-based interactive communication systems should

include branding elements if the company is involved in such activities. Logos, color choices, and other corporate identity elements can be included in the presentation to leverage branding activities in other media and continue efforts on-line.

Lab 5.1 Exercises

5.1.1 Understand Look, Feel, and the Big Idea

To complete this exercise, log onto the home or index page of the following Web sites and answer the questions for each site. You may want to bookmark these Web sites as we will return to them in the following exercises.

www.disney.com

What three adjectives can be
a) used to describe the look and
feel of this Web site?

What is a single-sentence
description that identifies the big

b) idea or theme behind the creative aspects of this Web site presentation?

www.gouldshawmut.com

What three adjectives can be
a) used to describe the look and feel of this Web site?

What is a single-sentence description that identifies the big
b) idea or theme behind the creative aspects of this Web site presentation?

www.putnaminvestments.com

What three adjectives can be
a) used to describe the look and
feel of this Web site?

What is a single-sentence
description that identifies the big
b) idea or theme behind the
creative aspects of this Web site
presentation?

www.llbean.com

What three adjectives can be
a) used to describe the look and
feel of this Web site?

What is a single-sentence

b) description that identifies the big idea or theme behind the creative aspects of this Web site presentation?

www.vw.com

a) What three adjectives can be used to describe the look and feel of this Web site?

b) What is a single-sentence description that identifies the big idea or theme behind the creative aspects of this Web site presentation?

What three adjectives can be
a) used to describe the look and
feel of this Web site?

What is a single-sentence
description that identifies the big
b) idea or theme behind the
creative aspects of this Web site
presentation?

5.1.2 Identify Audience Appeal and Engagement

Return to the index page of each site and answer these questions.

www.disney.com

a) What is the general target audience for this Web site?

b) How do the creative aspects of this site appeal to the target audience and engage it?

www.gouldshawmut.com

a) What is the general target

audience for this Web site?

How do the creative aspects of **b)** this site appeal to the target audience and engage it?

www.putnaminvestments.com

a) What is the general target audience for this Web site?

How do the creative aspects of **b)** this site appeal to the target audience and engage it?

www.llbean.com

a) What is the general target audience for this Web site?

b) How do the creative aspects of this site appeal to the target audience and engage it?

www.vw.com

a) What is the general target audience for this Web site?

b) How do the creative aspects of this site appeal to the target audience and engage it?

a) What is the general target audience for this Web site?

How do the creative aspects of **b)** this site appeal to the target audience and engage it?

5.1.3 Identify Branding Activities

Return to the Web sites discussed previously to assess

branding activities on the index page of each site.

www.disney.com

What branding activities are
a) immediately apparent on this
Web site?

www.gouldshawmut.com

What branding activities are
a) immediately apparent on this
Web site?

www.putnaminvestments.com

What branding activities are
a) immediately apparent on this
Web site?

www.llbean.com

What branding activities are
a) immediately apparent on this
Web site?

www.vw.com

What branding activities are

a) immediately apparent on this Web site?

www.aarp.org

What branding activities are
a) immediately apparent on this Web site?

Lab 5.1 Exercise Answers

5.1.1 Answers

To complete this exercise, log

onto the home or index page of the following Web sites and answer the questions for each site. You may want to bookmark these Web sites as we will return to them in the following exercises.

www.disney.com

What three adjectives
a) can be used to describe
the look and feel of this
Web site?

Answer: *Yours will vary, but mine
are fun, entertaining, and
colorful.*

b) What is a single-sentence description that identifies the big idea or theme behind the creative aspects of this Web site presentation?

Your answer will vary but could be something like this: Disney provides fun and entertainment using old characters and new stories.

Answer: Though this is a rather obvious statement, it provides a basic theme that represents the information presentation on the Web. All of the creative elements

support and complement this theme.

www.gouldshawmut.com

What three adjectives
a) can be used to describe
the look and feel of this
Web site?

Answer: *Yours will vary, but mine
are solid, standard, and
functional.*

What is a single-sentence
description that identifies
b) the big idea or theme
behind the creative

aspects of this Web site presentation?

Your answer will vary but could be something like this: Standard solutions that you can count on.

Answer: Though this Web site does not provide much eye candy, it does have a creative theme reflective of the company and products involved.

www.putnaminvestments.com

What three adjectives can be used to describe

a) the look and feel of this Web site?

Answer: *Yours will again vary, but mine are precise, conservative, and informative.*

What is a single-sentence description that identifies the big idea or theme behind the creative aspects of this Web site presentation?

b)

Your answer will vary but could be something like this: Information you can trust.

Answer: Again, the lack of creativity in this presentation is successful in producing a sparse, banklike presentation theme that is appropriate for this company.

www.llbean.com

What three adjectives
a) can be used to describe
the look and feel of this
Web site?

Answer: *Yours will probably differ,*
but mine are wholesome,
relaxing, and traditional.

What is a single-sentence description that identifies the big idea or theme behind the creative aspects of this Web site presentation?

Your answer will vary but could be something like this: Wholesome products and traditional business practices in an on-line shopping experience.

Answer: This company has a solid reputation and loyal customer base for its wholesome products and traditional business practices in retail and catalog direct marketing.

These concepts are presented in the appearance of this Web site.

www.vw.com

What three adjectives
a) can be used to describe the look and feel of this Web site?

Answer: *Yours will vary but mine are hip, slick, and cool.*

What is a single-sentence description that identifies the big idea or theme
b)

behind the creative aspects of this Web site presentation?

Your answer will again vary but could be something like this: Hip, slick, and cool vehicles for hip, slick, and cool people.

Answer: Interactive information and communications are presented in the same highly creative fashion as the company's advertising efforts in traditional media.

www.aarp.org

What three adjectives
a) can be used to describe
the look and feel of this
Web site?

Answer: *Yours may differ, but
mine include uplifting,
organized, and patriotic.*

What is a single-sentence
description that identifies
b) the big idea or theme
behind the creative
aspects of this Web site
presentation?

*Your answer will vary but
could be something like
this: News and benefits
people can use to be*

happier in retirement.

Answer:

This national association for retired persons utilizes a creative presentation similar to a newsletter for its membership.

5.1.2 Answers

Return to the index page of each site and answer these questions.

www.disney.com

What is the general target
a) audience for this Web
site?

Answer: *The target audience is
Disney fans, mostly
children and other family
members.*

How do the creative
b) aspects of this site appeal
to the target audience
and engage it?

Answer: *The colorful aspects,
cartoon characters, and
Disney icons are all
appealing to these
audiences and engage
this audience through
recognition.*

www.gouldshawmut.com

What is the general target
a) audience for this Web
site?

Answer: *The target audience for
this fuse manufacturing
company is buyers of
fuses and related
products.*

How do the creative
b) aspects of this site appeal
to the target audience
and engage it?

The audience is seeking dependable devices for electrical systems. The no-frills approach to this information presentation supports the standardization and trustworthy solutions provided by this company.

Answer:

Industrial supplies are not very flashy, but people buying them are not looking for highly creative presentations. What they are looking for is dependable, standard, and valuable products. This site is engaging to this audience by providing a presentation reflective of these concepts and consistent with the needs

of the audience.

www.putnaminvestments.com

What is the general target
a) audience for this Web
site?

Answer: *The target audience
includes individuals,
advisors, and monetary
managers seeking
information about the
management of theirs
and other people's
financial investments.*

How do the creative

b) aspects of this site appeal to the target audience and engage it?

The presentation appears intelligent, informative, and conservative, which are appealing traits when the management of investments is being discussed.

Answer:

This site engages the audience by appearing boring, secure, and noncreative, just as traditional banks have done for decades. This is highly appropriate and effective for the audience this information is targeted at. Cartoons are good for some, but

people's money is being discussed at this site.

www.llbean.com

What is the general target
a) audience for this Web site?

Answer: *The target audience includes current and prospective customers seeking consumer clothing, housewares, and outdoor activity products.*

How do the creative aspects of this site appeal

b) to the target audience and engage it?

The audience for this site is engaged by the outdoor scenery and activity representations, which they find appealing. This presentation also uses icons and text recognized by the audience.

Answer:

The creative presentation of this transaction-based site is very similar to the catalogs produced by this company for decades. An outdoor, adventuresome, and country lifestyle is reinforced. Traditional elements used for years

also help support the company's reputation in the marketplace.

www.vw.com

What is the general target
a) audience for this Web site?

Answer: *The target audience is prospective buyers and owners of Volkswagen vehicles.*

How do the creative
b) aspects of this site appeal to the target audience

and engage it?

The extremely modern, hip, and cool presentation is appealing to the young, successful, and progressive audience targeted by this company.

Answer: This company sells a lifestyle as part of its ongoing marketing efforts to sell vehicles. It engages people interested in joining this lifestyle by purchasing a vehicle and reinforces a my-car-is-cool-and-so-am-I concept in this presentation.

What is the general target audience for this Web site?

The audience for this site is current and prospective members of the

Answer: *American Association of Retired Persons, who are Americans over the age of 50 years old.*

How do the creative aspects of this site appeal to the target audience and engage it?

This site appeals to the audience by providing an
Answer: *information-rich presentation in an easy-to-read, uplifting, and patriotic manner.*

5.1.3 Answers

Return to the Web sites discussed previously to assess branding activities on the index page of each site.

www.disney.com

What branding activities
a) are immediately apparent
on this Web site?

The company's logo and internationally recognized rodent mascot are displayed prominently. Other well-known images and phrases also reinforce the branding effort.

Answer:

www.gouldshawmut.com

What branding activities
a) are immediately apparent
on this Web site?

Color, logos, and slogans
Answer: *are incorporated in the presentation.*

www.putnaminvestments.com

What branding activities
a) are immediately apparent
on this Web site?

*Corporate logos and other
identity elements are*
Answer: *included to reinforce this
company's brand in the
marketplace.*

www.llbean.com

What branding activities
a) are immediately apparent
on this Web site?

Answer: *Company logos, outdoor
images, and icons taken
from the company's
other media efforts
support a continuing
branding effort.*

www.vw.com

What branding activities
a) are immediately apparent
on this Web site?

Answer:

This site is particularly strong as a branding tool, serving as an on-line extension of branding campaigns in other media. Logos, slogans, and graphics are utilized in the same manner as the company's extensive brand-building strategy.

www.aarp.org

What branding activities
a) are immediately apparent
on this Web site?

*Logos and colors are used
to tie this Web site to the*

Answer: *organization's other communication efforts and to make the site consistent for member recognition.*

Lab 5.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

The big idea for a creative presentation does what?

1. _____ Identifies the creative

aspects

- _____ Summarizes the look and
1) feel of the presentation
- _____ Acts as a benchmark for the creative development process
- _____ All of these
- _____ None of these

The look and feel of a presentation involves which concepts?

1. _____ General appearance

- _____ HTML coding
- 2)** ● _____ Database interfaces

- _____ Emotional triggers
- _____ Astrophysics

Branding is the process of directly selling products to consumers.

3) 1. _____ **True**

- _____ False

Branding is the process of building company and product recognition with an audience over time.

4) 1. _____ **True**

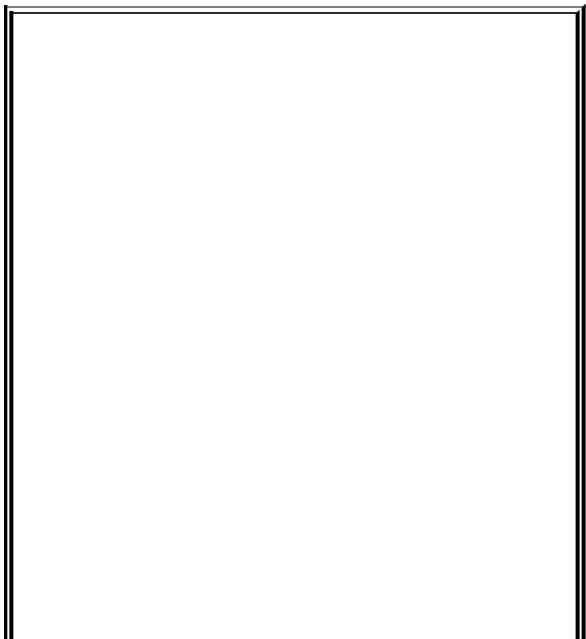
- _____ False

Creative elements of a Web presentation should do what?

1. _____ **Look cool regardless of download speed**

- 5) ● _____ Have flashing text
- _____ Engage and appeal to the target audience
- _____ Differ from traditional media
- _____ Inspire devotion

Lab 5.2: Creative Evaluation



Lab Objectives

After this lab, you will be able to

- [Identify Text Usage in a Creative Strategy](#)
- [Assess Visuals in a Creative Strategy](#)

Web-based presentations are primarily a visual experience. The basic building blocks of creative content are the same as traditional printed materials. These can be described in two distinct groups: text and

visuals. This lab evaluates the use of these two elements to demonstrate their use in Web creative strategy.

Text includes words, phrases, slogans, headlines, captions, etc. Visuals include almost everything else, such as color, images, photographs, drawings, graphics, and icons. Placement of these elements, including textual elements, is also a visual discussion. Text-based logos can usually be considered a visual element, especially if the logo is used in a branding effort.

A magazine page is a good example. Most magazine pages contain a combination of text and visual elements. The editorial content is presented in text using columns on the page. The size and kind of the actual typeface, or font, used is probably targeted to the audience of the magazine. Visual elements may include photographs or other images. The amount of white space and the use of color on the page are both important visual elements. Smaller graphics may help identify the section of

the magazine or add to the look and feel of the presentation in some way. Even page numbers and their appearance are considered in the creative theme of the magazine.

Newspapers use the same two elements in a variety of different ways to present information and advertising messages. Compare the front pages of your local paper with *USA Today*. Text and images are probably used differently in each to create a look and feel for each publication. Even if

they are delivering the same information, the two publications will demonstrate two distinct creative strategies based on their respective audiences.

Richer media, including sound, video, and animation, are becoming more widespread on the Internet but are primarily used at this point to augment the initial text and graphics of a presentation. Except for sound, most multimedia elements can also be considered visual items.

A Web page, especially the home page of a Web site, uses the same two elements in the creative aspects of its presentation. Starting from a hypothetical blank page, an information presentation is built that engages the audience by appealing to its wants, needs, and desires. Utilizing a big idea or creative theme, a combination of text and visuals is used to present the communications effort.

In some situations, text plays a primary role in supporting the creative theme and targeting

the audience. In others, visual imagery is the driving force behind look and feel development. In either situation, appealing to the end user is the creative strategy goal.

Lab 5.2 Exercises

5.2.1 Identify Text Usage in Creative Strategy

Describe the use of text on the home page of these Web sites.

www.disney.com

a) How is text used in this Web site presentation?

www.gouldshawmut.com

a) How is text used in this Web site presentation?

www.putnaminvestments.com

a) How is text used in this Web site presentation?

www.llbean.com

a) How is text used in this Web site presentation?

www.vw.com

a) How is text used in this Web site presentation?

www.aarp.com

a) How is text used in this Web site presentation?

5.2.2 Assess Visuals in Creative Strategy

Return to these Web sites and describe the use of graphics and other visual elements on the home page of these sites.

www.disney.com

How are graphics utilized in this

a) Web site presentation?

www.gouldshawmut.com

a) How are graphics utilized in this Web site presentation?

www.putnaminvestments.com

a) How are graphics utilized in this Web site presentation?

www.llbean.com

a) How are graphics utilized in this Web site presentation?

www.vw.com

a) How are graphics utilized in this Web site presentation?

www.aarp.com

a) How are graphics utilized in this Web site presentation?

Lab 5.2 Exercise Answers

5.2.1 Answers

Describe the use of text on the home page of these Web sites.

www.disney.com

a) How is text used in this Web site presentation?

*Your answer will vary.
The following is mine:*

A lot of text is used but it is secondary to images. The text is used for identification of subject matter and for

Answer:

navigational links to information. Text is not necessarily included for reading in a traditional sense but instead serves a functional purpose.

www.gouldshawmut.com

a) How is text used in this Web site presentation?

Again, your answer will vary. Mine follows.

Quite different from the previous example, this presentation is based on text. Like an informative

Answer: brochure, easily read text is the primary content and is also used for navigational purposes. This helps drives the theme of the presentation, which is a dependable solution.

www.putnaminvestments.com

a) How is text used in this Web site presentation?

Your answer will be in your own words. Here is mine.

This is another example

Answer:

where text is the primary factor in the content of this presentation.

Presented in a professional, concise, and straightforward manner, this text-based content drives the presentation toward its conservative and informative theme.

www.llbean.com

a) How is text used in this Web site presentation?

Your answer will vary but might include aspects of mine.

This Web presentation utilizes text primarily for headlines and for captions to graphics, similar to a catalog. The text is less important than the images. Text is used for navigational purposes and is present in the logo. But it is not as significant a factor in delivering the theme as visual images are.

Answer:

www.vw.com

a) How is text used in this Web site presentation?

Your answer will be based on your perspective. Here is mine.

Answer:

Text is used in this presentation in an intelligent and informative fashion to explain navigation and deliver content. It plays an equally significant part of the presentation as do visual images. The use of text is slick, like rest of the material.

www.aarp.com

a) How is text used in this Web site presentation?

Yours will vary but may be similar to mine.

Answer:

This informative presentation is dependent on text to support the site's newsletter look, deliver its content, and provide internal navigation. The text is also especially easy to read, which is an important consideration for its audience.

5.2.2 Answers

Return to these Web sites and describe the use of graphics and other visual elements on the home page of these sites.

www.disney.com

How are graphics utilized
a) in this Web site
presentation?

*Your answer will be based
on your interpretation of
this and the other sites.
Here is mine.*

Graphics are significant,
as the whole presentation
is very colorful and rich

Answer: with recognizable images. This use of visual images seems quite appropriate considering the entertainment subject matter and helps support the animated fun of the creative theme.

www.gouldshawmut.com

How are graphics utilized
a) in this Web site presentation?

Again, your answer will vary from mine.

Graphics do not play a

Answer: significant role on this site except to reinforce branding activities. Limited variation in color helps support the creative theme of standardization and simplicity.

www.putnaminvestments.com

How are graphics utilized
a) in this Web site presentation?

The following is my answer.

This site uses almost no graphics and little color.

Answer: Beside very basic logos, the site content and navigation are text based, which supports the serious nature of the subject matter.

www.llbean.com

How are graphics utilized
a) in this Web site presentation?

Yours will vary but should include some of the following.

This site utilizes visual imagery and appropriate

Answer:

colors to engage the audience in a similar fashion as other media. Outdoor images and seasonal color variations are prevalent, which drive the creative content of the presentation. Product images are given precedence over text explanations.

www.vw.com

How are graphics utilized
a) in this Web site presentation?

Again, your answers will

vary from mine.

Logos, product images, and targeted audience images play a major role in this presentation.

Answer:

Graphical elements support navigation. Speed and quickness are also incorporated into images to support the product benefits. Colors are cool.

www.aarp.com

How are graphics utilized
a) in this Web site presentation?

Here is my perspective.

Answer:

Logos and limited images to aid identification for the audiences are included in a limited fashion. Colors are patriotic.

Lab 5.2 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

The building blocks of a Web site's

creative presentation are which?

1. _____ Headlines

- 1)
- _____ Text
 - _____ Sound files
 - _____ Visuals
 - _____ Logos

Navigational aides are provided on Web sites using which?

1. _____ Text

- 2)
- _____ Graphics
 - _____ Both

- _____ Neither

The use of color is not important in Web creative strategy.

3) 1. _____ **True**

- _____ False

Text is sometimes used to execute the creative theme of a Web presentation.

4) 1. _____ **True**

- _____ False

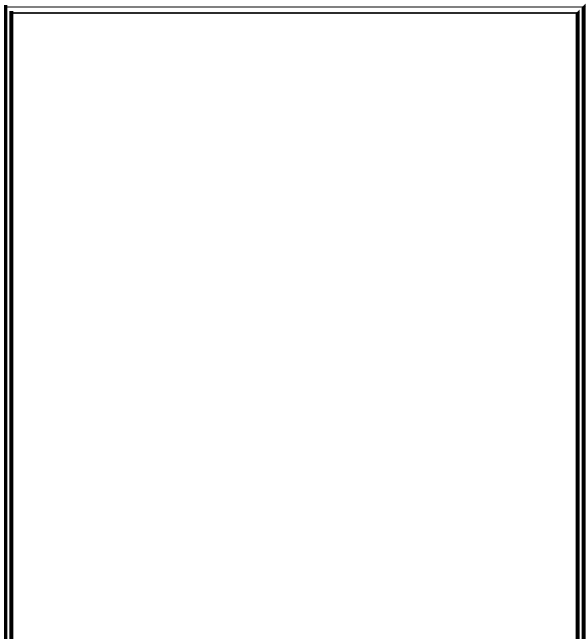
The creative theme or big idea of a Web presentation should do what?

1. _____ **Appeal to the target**

audience

- _____ Involve a lot of pretty
5) pictures
- _____ Engage the target audience
- _____ Sell a lot of widgets
- _____ Involve massive expense

Lab 5.3: Creative Development



Lab Objectives

After this lab you will be able to

- [Brainstorm the Evaluation of a Product or Organization](#)
- [Brainstorm the Targeted Audience Solutions](#)
- [Build Connections and Visualization](#)
- [Repurpose Information](#)
- [Understand the Importance of Copy Writing](#)

In this lab, we will look at some

basic concepts that are helpful when developing the creative elements of a Web presentation.

The previous two labs highlighted the continuing theme of targeting creative strategy to the intended audience. Developing a targeted strategy can be accomplished in three steps:

Identify
product/organization
issues defined as features
and benefits.

Identify audience issues that include the audience's wants, needs, and desires and solutions for them.

Build connections between these two sets of issues to create appeal and engagement and develop visualization.

In this model, features are facts or ideas that can be attributed directly to the product or company being discussed. Benefits are

statements that explain how this product or company will satisfy wants, needs, and desires for the customer or audience. Both sets of statements are written from the company or products perspective. This evaluation helps marketers determine what they've got to communicate about.

Audience issues are written from their own perspective as well. First the audience is identified and described. Then audience wants, needs, and desires are written from an

objective perspective without any consideration of the product or company being discussed. Audience solutions are also listed without initial consideration of the product or company. This step helps marketers determine exactly what the targeted customer wants.

The third step builds connections between the first two lists. Marketers look at what they have first. Then they look at what the audience needs. Developing ways to portray the company or product

as what the audience wants, needs, and desires is fundamentally what marketing is based on.

Matching features and benefits with the wants, needs, and desires of the audience creates appeal and engagement. Presentations can then be built that leverage these two concepts against each other.

Developing creative strategy for Web presentations requires textual and visual representation of these concepts. Textual statements

are relatively straightforward. The use of text and other visual elements is dependent on the audience and issues involved.

In a true creative fashion, these steps should each involve a brainstorming session, in which any and every idea on a topic is communicated and captured. Brainstorming usually involves a small group of people stating ideas as they are conceived. A note taker or facilitator writes down every idea as it is announced. These ideas can later be reviewed and refined to develop an

appropriate creative strategy.

For

www.putnaminvestments.com,

an example development effort could look like this:

- Organizational issues about this company could include the following:
 - Features
conservative, low-risk,
professional, precise,
dependable, smart,
realistic, intelligent,
informative, helpful,

careful, wealthy,
successful, traditional,
etc.

- Benefits company
takes care of its clients;
money is safe with
company; company
knows what to do with
money; investments
succeed; professional
operation with
experience and
confidence; etc.

- Audiences are varied but all
are investors. Investors

want financial gain with minimal risk. They need security and serious consideration.

- Audience wants, needs, and desires include trustworthy and lucrative investment management; security about their financial future; intelligent decisions made on their behalf; information about the status of their investments; serious approach to a serious matter; etc.

- Connections can be made between the features and benefits and the audience wants, needs, and desires. Company provides intelligence, security, informed decisions, successful investments, and conservative approach to business for the customers all things audience members want.
- Visualization of these connections appears on the site: a professional appearance stressing an

informed, secure, and conservative approach that uses mostly text to represent this creative theme.

Another aspect of creative development involves the decision to repurpose information. Repurposing information involves using existing materials and graphics in a presentation to continue branding efforts, return continued impact for previous creative investment, and tie Internet communication with

other media. The McDonald's golden arches are a repurposed image used to support branding activities.

Other uses of repurposed materials could be product information, technical data images, and graphics that were developed for other media but can be utilized in Internet communication as well. An e-mail newsletter may distribute informational content that was originally published in hard copy. This could be considered repurposed material.

Copy writing is the process of developing text-based marketing communication materials. Without going into a diatribe on the sinking quality of our civilization, let's just say that people don't read like they used to. People look but don't actually read most marketing copy.

Although books, magazines, and newspapers are read by millions of people every day (including you right now), the growth of other media and the overwhelming amount of images has shifted reading

patterns in many people. Instead of actually reading text, many people just look at it.

The commitment to reading isn't present. Most text is skimmed or briefly reviewed. In-depth processing of text material is saved for entertainment novels or work-related material.

This means that marketing copy on the Web must be short and sweet. This situation was demonstrated on the Web sites we evaluated earlier. Headlines,

captions, and short statements are the primary text formats in Web presentation development.

Lab 5.3 Exercises

5.3.1 Brainstorm the Evaluation of a Product or Organization

To understand the basics of a creative brainstorming process, start by first evaluating the

product or company issues. List as many features and benefits as possible about a product. Be sure to write down every idea you can come up with in the next few minutes in a true brainstorming fashion.

a) What are some of the features of water?

b) What are some of the benefits of water?

5.3.2 Brainstorm the

Targeted Audience Solutions

Identify audience issues by determining as many solutions as possible that the target audience may be seeking for fulfillment of wants, needs, and desires. For this exercise the audience is marathon runners.

a) Who is the target audience?

b) How can you briefly describe the target audience?

c) What solutions to wants, needs, and desires does water provide for this audience?

5.3.3 Build Connections and Visualization

Identify ways to appeal to and engage this audience through creative content presentations. Review connections between the product evaluations and the audience solutions from the previous two exercises. Then

develop a big idea that can be stated in one sentence, which describes the creative approach of this product presentation to this audience. Finally, list ideas for visually representing this creative strategy.

a) What connections can be built between the features and benefits of water and the wants, needs, and desires of marathon runners?

b) What is a big idea or theme that can be used as a creative strategy in a presentation on water for marathon runners?

How can this theme be represented c) visually in the creative content of the presentation?

5.3.4 Repurpose Information

To demonstrate the concept of repurposing materials, let's return to two of the Web sites from a previous lab and look for examples of repurposed information.

Log on to the home page of

www.disney.com.

List examples of repurposed material
a) that you recognize from other media efforts.

Log on to the home page of
www.llbean.com.

List examples of repurposed material
a) that you recognize from other media efforts.

5.3.5 Understand the

Importance of Copy Writing

To understand the real importance of copy writing in the creative development of visual presentations, complete the following exercise.

Read the following sentence once. While doing so, count the number of times the letter F appears. Please read the sentence only once at this time.

Finished files are the result of years of scientific evidence combined with the sharing of discoveries.

a) How many times does the letter F appear?

Now read the sentence again very slowly. Count the appearances of the letter F again.

a) Do you get a different number?

b) What does this tell us about the importance of copy writing in visual presentations?

Lab 5.3 Exercise Answers

5.3.1 Answers

To understand the basics of a creative brainstorming process, start by first evaluating the product or company issues. List as many features and benefits as possible about a product. Be sure to write down every idea

you can come up with in the next few minutes in a true brainstorming fashion.

a) What are some of the features of water?

Yours will vary, but here are mine:

Answer: Wet, dampening, cooling, refreshing, available, elemental, natural, life giving, solution providing, thirst quenching, diluting, dissolving, soothing, calming, lubricating, insulating, heavy, healthy.

What are some of the benefits

b) of water?

Yours will again vary, but could include the following:

Water provides dampness and replaces dryness. Living things need water to flourish and to replace water lost through processes. Water is refreshing and cooling in hot situations. Water is a naturally occurring element that provides and sustains life. Water dilutes and dissolves many substances and creates solutions.

Answer:

5.3.2 Answers

Identify audience issues by determining as many solutions as possible that the target audience may be seeking for fulfillment of wants, needs, and desires. For this exercise the audience is marathon runners.

a) Who is the target audience?

Answer: *The target audience is marathon runners.*

b) How can you briefly describe the target audience?

Your answer will vary, but mine

follows.

Marathon runners are people who exercise frequently and run many, many miles on a regular basis. They are healthy. They perspire a lot. They also get very hot while running and exercising.

Answer:

What solutions to wants, needs, **c)** and desires does water provide for this audience?

Marathon runners need a lot of water to replace the water they lose through perspiration.

Runners of this type are very healthy, probably are engaged in a healthy lifestyle, and drinking water regularly is part of such a lifestyle. Water is also cooling and refreshing for runners while

Answer:

they exercise.

5.3.3 Answers

Identify ways to appeal to and engage this audience through creative content presentations. Review connections between the product evaluations and the audience solutions from the previous two exercises. Then develop a big idea that can be stated in one sentence, which describes the creative approach of this product presentation to

this audience. Finally, list ideas for visually representing this creative strategy.

What connections can be built between the features and
a) benefits of water and the wants, needs, and desires of marathon runners?

Yours will vary, but here are mine.

Marathon runners need water to run. Runners get thirsty and water quenches thirst. Runners need water to replace lost fluids.

Answer: They want water to be part of their healthy lifestyle. They desire water to be cool and

refreshed. Connecting features, benefits, and audiences is the primary role of creative brainstorming efforts.

b) What is a big idea or theme that can be used as a creative strategy in a presentation on water for marathon runners?

Again, yours will vary but here are my big ideas.

Water is life for runners. Running is hot while water is not. Run a lot and drink a lot. Simple phrases like these are useful for identifying creative themes.

These themes can then serve as benchmarks for presentation development. Every idea, image, or text item can be created and

Answer:

critiqued based on the selected theme.

c) How can this theme be represented visually in the creative content of the presentation?

Your answers will vary but could include the following:

Warm colors juxtaposed with cool colors. Water graphics. Natural water environments and scenery could be used in a visual presentation of these concepts. These visual concepts and other creative elements built into a Web presentation will appeal to the audience they were developed for. In this example,

Answer:

marathon runners will be engaged by a presentation created with their wants, needs, and desires in mind.

5.3.4 Answers

To demonstrate the concept of repurposing materials, let's return to two of the Web sites from a previous lab and look for examples of repurposed information.

Log on to the home page of www.disney.com.

List examples of repurposed material that you recognize from other media efforts.

Your answers will vary but should include images taken from movies and other media developed by this company. The logo in use is probably utilized in other media, as well as the infamous Mickey Mouse character. Characters from recent movies and cartoons are also involved.

This use of repurposed material is to be expected at a Web site for a media company with

Answer: recognized images as part of its brand identity. This company spends millions of dollars on advertising and promotion.

These efforts increase and sustain recognition of these images in the consumer marketplace. Incorporating them on the Web site is a continuation of these efforts. In addition, the inclusion of newly developed images further leverages the investments made in other media activities to increase recognition and build awareness.

Log on to the home page of www.llbean.com.

a) List examples of repurposed material that you recognize from other media efforts.

Again, your answers will vary. This home page displays images and text used in the company's traditional catalogs and other media.

Like the previous example, the inclusion of these materials provides continuing value for the investments made in advertising and direct marketing efforts.

Answer:

Usage also ties into the various catalog programs to build synergy between media.

Repurposed material also includes information and material developed and distributed in the printed catalogs. Product information, images, and technical specifications that currently exist in electronic formats are easily utilized in this Web presentation.

5.3.5 Answers

To understand the real importance of copy writing in the creative development of visual presentations, complete the following exercise.

Read the following sentence once. While doing so, count the number of times the letter F appears. Please read the sentence only once at this time.

Finished files are the result of years of scientific evidence combined with the sharing of discoveries.

a) How many times does the letter F appear?

Answer: *Most people notice the letter F three times in the first reading.*

Now read the sentence again very slowly. Count the appearances of the letter F again.

a) Do you get a different number?

You probably noticed the presence of more Fs in the next reading. The actual number of times F appears is six.

Answer:

b) What does this tell us about the importance of copy writing in visual presentations?

Your answer may be that people don't notice silent letters. But more important, this simple exercise helps demonstrate how fast most people read textual information and that extensive copy writing is not as important as many of us think.

Many creative development

efforts are heavily geared to getting just the right series of words to describe, explain, or extol a product, service, or situation. But many of these agonizing decisions are not worth the time spent. Many people only look at text instead of actually reading it. Many phrases and thought-out text blocks in traditional communication efforts are not read by the audience members. They may be looked at but not read.

Answer:

This is definitely the case in Internet communication, where the fast-paced nature and the shrinking patience level of most audience members add to the situation. In interactive media, the less text that is used to convey a message the better

the chance it will be read.

This means that Web copy writing must be extremely concise and directly targeted to the audience involved. Images can be used instead of text in many situations. And text should probably exist as short statements and headlines instead of complete sentences.

Lab 5.3 Self-Review Questions

In order to test your progress, you should be able to answer

the following questions:

Evaluating a product or company for creative presentation involves looking at what?

1. _____ Ownership and funding

- 1)
- _____ Current efforts
 - _____ Other sites
 - _____ Features and benefits
 - _____ Yellow pages

Assessing the target audience should be done from what perspective?

1. _____ The company's

perspective of the audience

- 2)**
- _____ A truly objective perspective
 - _____ The perspective held by the targeted audience
 - _____ None of these

Engaging creative presentation is based on connections between the audience and product or company.

- 3)**
- 1. _____ True**

- _____ False

Appealing to the audience wants, needs, and desires is not important in the creative theme of a Web presentation.

4) 1. _____ **True**

- _____ **False**

Large amounts of text should be developed and included in Web presentations.

5) 1. _____ **True**

- _____ **False**

Repurposed material could include which?

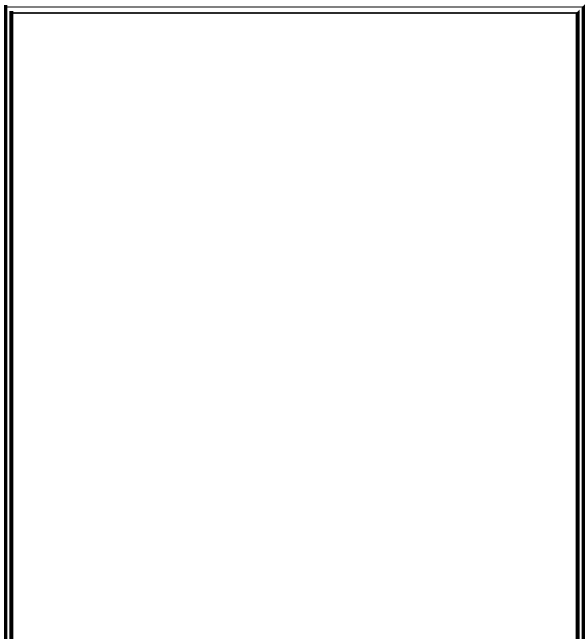
1. _____ **Logos and branding elements**

- _____ **Materials developed for**

6) distribution in other media

- _____ Product images and information
- _____ None of these
- _____ All of these

Lab 5.4: A WWW Critique Model



Lab Objectives

After this lab you will be able to

- [Rate a Good, Ugly, and Bad Web Site](#)

This lab introduces a useful critique model for assessing Web sites and their creative presentations. The World Wide Web has been compared to the Wild Wild West in American history due to its quick expansion, unproven business models, the general wide open nature, and free-range spirit of

this communication medium. One of my favorite films depicting this time frame and its outlaw characteristics is the movie *The Good, the Bad, and the Ugly*, starring Clint Eastwood.

Current Web presentations tend to fall into one of three categories: good, ugly, and bad. This process is not an exact science but rather a loose, fun, and very subjective way to think about Web site communication efforts:

- The good Web site looks good and delivers information wanted by an audience. Creative strategy engages the targeted audience and content presentation informs. This type of site looks a good and does a good job delivering appropriate interactive communication.
- The ugly Web site looks bad but delivers the goods. This type of site may not have an engaging creative strategy, but the

presentation successfully informs and communicates with the audience.

- The bad Web site looks bad and doesn't deliver information wanted by the target audience. A bad Web site doesn't have an engaging creative presentation and doesn't communicate successfully. Another type of bad Web site is one that looks good, with lots of appealing creative elements, but has no useful content. This

version of the bad Web site is particularly frustrating due to overdone graphics and slow-loading multimedia elements that don't deliver any worthwhile interactive communication.

Another useful term for describing Web sites involves the level of stickiness. A sticky Web site is one that keeps its audience engaged with interactive communication presented in an appealing fashion. Good Web sites are

sticky; end users can't leave because they are so well engaged and informed. Ugly Web sites are kind of sticky or maybe sticky enough with room for increases in stickiness. End users stay for a while but are not stuck there. Bad Web sites are not sticky. End users leave as soon as they can.

Lab 5.4 Exercises

5.4.1 Rating a Good, Ugly, and Bad Web

Site

Critique the Web sites listed here with a rating of good, bad, or ugly based on your interpretation of these definitions.

www.disney.com

a) Is this site good, bad, or ugly?

b) Why do you rate it this way?

www.gouldshawmut.com

a) Is this site good, bad, or ugly?

b) Why do you rate it this way?

www.putnaminvestments.com

a) Is this site good, bad, or ugly?

b) Why do you rate it this way?

www.llbean.com

a) Is this site good, bad, or ugly?

b) Why do you rate it this way?

www.vw.com

a) Is this site good, bad, or ugly?

b) Why do you rate it this way?

www.aarp.org

a) Is this site good, bad, or ugly?

b) Why do you rate it this way?

Lab 5.4 Exercise Answers

5.4.1 Answers

Critique the Web sites listed here with a rating of good, bad, or ugly based on your interpretation of these definitions.

www.disney.com

a) Is this site good, bad, or ugly?

Answer: *Your ranking may be different, but I rank this Web site as good.*

b) Why do you rate it this way?

Your answer is based on your ranking. I think that the creative aspects of this Web site are fun and engaging for its entertainment-seeking audience members, who are mostly children. The site is also packed with information and media presentations, making it highly informative and sticky as well.

a) Is this site good, bad, or ugly?

Answer: *Your ranking is based on your opinion, but I would have to give this site an ugly ranking.*

b) Why do you rate it this way?

Your answer is based on your perspective. Mine is based on the information-rich presentation geared toward that company's

Answer: *audience and presented in a boring, uncreative fashion. The site is ugly but delivers the information its audience wants. Not sticky but effective.*

www.putnaminvestments.com

a) Is this site good, bad, or ugly?

Answer: *My answer is to rank this site as good.*

b) Why do you rate it this way?

Though the appearance is sparse, I believe the presentation is appropriate for the audience involved. This site is highly informative and provides relationship-building interactions that increase the sticky factor significantly.

Answer:

www.llbean.com

a) Is this site good, bad, or ugly?

As an old school direct marketer, I must rate

Answer:

this site as good.

b) Why do you rate it this way?

Answer: *Again my subjective opinion is that I find this site highly attractive to its loyal customer base while providing an interactive shopping experience. As an L.L. Bean guy, I find this site as sticky as a well-read catalog.*

www.vw.com

a) Is this site good, bad, or ugly?

Though it should be quite obvious by now that I chose these Web sites as examples and therefore must like them, I also feel this is a good site using this ranking system.

Answer:

b) Why do you rate it this way?

Engaging for hip, slick, and cool people with hip, slick, and cool creative presentations, this sticky site also informs, entertains, and builds

Answer:

*relationships with
potential and returning
customers.*

www.aarp.org

a) Is this site good, bad, or ugly?

Answer: *Though you may not
agree, I see this as
another good site.*

b) Why do you rate it this way?

Targeted to its audience

with appropriate use of text and visuals, this site is also highly informative for its audience. Sticky for the retired set.

This exercise is lacking a bad Web site example. This was done for two distinct reasons. First, Web sites are dynamic and may not be bad by the time you are reading this book. Second, it's not very nice to comment negatively about a Web site in a publication such as this.

Answer:

Web communicators are doing the best they can in most situations.

I am confident that all Web users have visited a

site that was not especially pleasant to look at and contained little valuable information. Some promotional sites even look quite good but contain no value. These sites might actually negatively affect relationships by frustrating the audience they are trying to reach. You can probably identify a bad site with little effort, unfortunately.

Lab 5.4 Self-review Questions

In order to test your progress, you should be able to answer the following questions:

A good Web site has which traits?

1. _____ Engaging presentation

- _____ Appropriate information and communication

1)

- _____ Stickiness
- _____ All of these
- _____ None of these

A bad Web site has which traits?

1. _____ Engaging presentation

● _____ Appropriate information and
2) communication

● _____ Stickiness

● _____ All of these

● _____ None of these

An ugly Web site may look bad but still deliver appropriate communication exchanges for the target audience.

3)

1. _____ True

● _____ False

Stickiness describes keeping end users

4) engaged at a Web site.

1. _____ **True**

- _____ False

Chapter 5: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

Brainstorm connections between your

audience and the solutions that the organization provides to its targeted audience. What connections exist that can be used to develop a creative strategy?

Develop a creative theme utilizing a look and feel that appeals to the target audience. What is the single sentence that describes your big idea?

Decide how text and visuals can be used in the creative presentation to fit the creative theme. Which will play a bigger role?

What branding elements may be included in the presentation?

Consider how your site engages and

5) presents to its audience, making it a good Web site. Why will your site be sticky for its audience?

Chapter 6.

Promotion and Measurement



*It pays to advertise;
but you pay first.*

Anonymous

A hit, a very palpable hit.

Osric, *Hamlet*,
Shakespeare

Chapter Objectives

In this chapter, you will learn about

- ✓ [Promoting Internet Communication Efforts](#)

- ✓ [Measuring Internet Communication Activities](#)

In this chapter we will discuss some issues that become relevant after an Internet communication effort has been developed. Both discussions focus primarily on Web-based

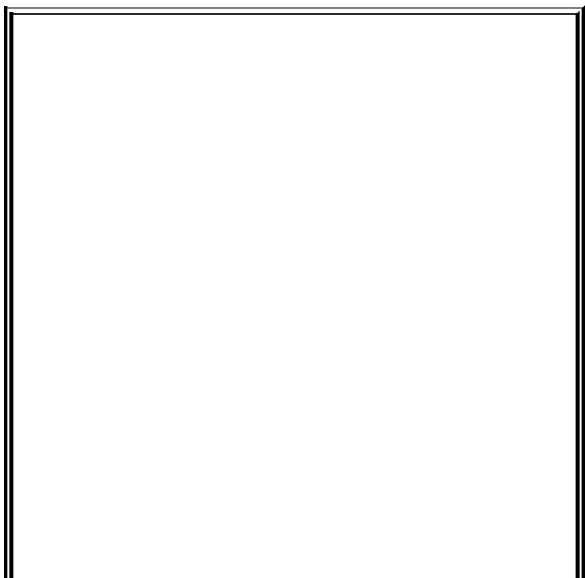
communications activities, but some of the concepts could be applied to e-mail activities as well.

The issues include the promotion of an Internet communications effort and the measurement of an effort once it is under way. Promotion describes the act of telling somebody about something. In this case, we need to tell our targeted audiences about a Web communication effort in order to engage them.

Measurement involves

reviewing data from different sources to analyze the status of our efforts. Data can include technical data and impersonal and personal information captured through our communications activities. A positive aspect of Internet communication is that the technology provides several methods for in-depth capturing, profiling, and reviewing of activities. This captured information can be used to improve presentations, engage audiences, and fulfill wants, needs, and desires.

Lab 6.1: Promoting Internet Communication Efforts



Lab Objectives

After this Lab, you will be able to

- [Understand Traditional Media Promotion](#)
- [Understand Search Engine Positioning](#)
- [Understand Directory Listings](#)
- [Understand Banners and Buying Links](#)
- [Understand Relationship Links](#)

Putting up a Web site is similar

to building a billboard in your basement. It may look good, but unless somebody is searching for it, they will not see it. This lab introduces the primary options that are available to Webmasters planning to promote an Internet communications effort. The discussion centers on the promotion of Web-based communication efforts.

Promotion of an effort is important because it informs a current or potential audience member of your organization's efforts and provides an

opportunity for end users to initiate communication with you. Since the Internet medium is driven by end-user motivation, it is necessary for your potential audiences to know how to communicate with your organization over the Internet.

The key to promotion, like everything else on the Internet, is targeting the correct audience. Promotion must be targeted at the audience the Internet effort is designed to reach. You must use the appropriate media to

reach that audience and inform its members of the Web site and how it will fulfill their wants, needs, and desires.

Your existing audience may need notification of your organization's Internet communication efforts so they can begin transforming communication to this new method. Customers of a manufacturing company will need to be told they can seek product information and order status reports via the Web once those systems are set up. And if those same customers come

onto the Web looking for a way to communicate with the company, it is important for the company to be listed in the various search engines and directories in use.

If your organization is seeking a new audience on the Internet, then it's necessary to promote your effort in a way that informs this new audience of your presence. A number of options are available to promote an Internet communications effort. These options fall into two categories: (1) efforts using traditional

media and communication channels, and (2) activities that can be conducted on the Internet itself.

The first category includes any and all of the existing communication methods that are available off-line. These methods may or may not be in use for promotion or marketing activities by your organization. If they are in use, then the promotion of a Web site can be built into existing advertising and promotional activities.

If your organization is new or

doesn't use traditional advertising methods, then it should consider promoting a Web communications effort. If you are operating a new business or other effort on the Internet, then traditional media channels can be used to drive end users onto a Web site.

Traditional media channels include the following options. Other methods exist as well, but these methods and their descriptions are a good place to begin promoting a Web communications effort.

- Mail-based communication, including postcards, letters, self-mailers, and catalogs, is the first medium to consider. This medium is the basis for most original direct marketing and is still very effective for communication with both customers and a prospective audience. Highly targetable and cost effective, mail is an excellent tool for promotion. One technique could involve making special offers to end users

that require a Web-based response. Others could involve special discounts to catalog customers that use a Web transaction site.

- Broadcast media, including TV and radio, are very expensive but could be important if you need to reach a broad, mass-market audience. TV ads can easily carry Web addresses, and several large companies are including Web communication in national

branding campaigns. An example is the Volkswagen effort discussed previously. Local TV ads are also available. I recently saw a local used car dealer carry a Web address on a TV spot.

- Radio promotion is easier to target than TV. Many business marketers use news radio ads to deliver offers to commuters during drive times. The use of this media could also be effective if a Web effort is

targeted to this audience. Consumer marketers use radio promotion targeted at the demographics of the listening audiences of specific radio stations. Radio stations that have a young audience carry a lot of soft drink ads. Stations playing music for older listeners carry a lot of car advertisements. Web sites can be promoted using the same targeting criteria to reach specific audiences.

- Public relations is an

indirect promotion effort. Public relations efforts involve media releases and press conferences to inform the media of an issue. These activities involve professionals who build relationships with media representatives and journalists. The objective is to gain "free media" or publicity and be included in the editorial content of magazines, newspapers, and broadcast journalism. This is difficult to accomplish without

professional help on a national level. But locally, gaining media coverage about a Web communications effort may not be as difficult. In addition, trade magazines, publications, and newsletters that reach your targeted audience may be good places to focus public relations activities.

- Print media is driven by space advertising. This is another excellent method to promote an Internet

communications effort. Promotion can be targeted at the readership of an appropriate publication. Specific space ads can be run carrying offers that drive readers onto a Web site. Addresses and e-mail can also be included as part of the ad's copy.

- Packaging for products or even informational packets is another vehicle for promotion. Since these materials are a necessary part of communicating with

audience members, it's a good idea to promote Internet communication as well. Since people receiving these kinds of materials already have a relationship with your organization, these are excellent vehicles to begin transforming traditional customer service activities to Internet communication.

- Billboards and other signage are used by some companies and organizations for

advertising and branding activities. These same efforts can be used to promote Web sites to the localized, mass-market audiences they reach.

On-line promotion is available to Webmasters wishing to promote a Web site or engage an audience. It is only useful in reaching the Internet audience, but that audience is growing daily.

This chapter discusses four areas ways to promote a Web

site on-line. The first two activities involve search engines and Web directories. The second two methods involve creating links to a Web site by paying for them or sharing them with another Web site.

Search engines and Web directories are very similar and have a similar interface for the end user. But they are different as well. Both consist of information about Web pages taken from the actual Web pages stored on Web servers worldwide. Both store and

catalog information about Web pages store the information in a database. And both provide opportunities for end users to search these databases, looking for the information they seek.

The primary difference between these two resources is how the information is originally stored in the databases. A search engine is sometimes called a search bot, or spider, because it uses a software tool to catalog the entire World Wide Web, following every link to every public Web site available and cataloging the text information

on each Web page.

This information is then stored in a database or index. A search of this database requires the use of key words, meaning words that represent the subject of the search. A search will turn up pages that carry these key words. It is similar to looking up a phone number in the white pages. Altavista.com is an excellent example of this type of resource.

A Web directory is similar in many ways except that the information it provides was

submitted to the administrators of the directory. Web sites are reviewed and categorized by human reviewers based on the content of the site. Searches of a directory yield results from the content of the directory, not the whole Web. And searches yield categories of information listed in the directories in addition to the individual Web pages involved. Directories can also be examined manually, like looking up a subject in the yellow pages, where information is stored in

hierarchical fashion.

Unfortunately, the searching and storage systems for both of these types of resources are text-based. Written words are not the best ways to identify an idea or concept. The word *fly*, for instance, has many meanings. *To fly* is a verb involving soaring through the air. A *fly* is a noun describing an insect. A computer only sees one word, not the context it is written in.

The text issue is very apparent when using search engines.

Searching for a key word will provide every Web page that contains that word. This means that a lot of matches won't be appropriate. Combinations of key words yield better results in search engines because pages that are found with the same words are probably related to the subject involved but not always.

To provide better searching ability, the administrators of search engines are constantly improving the systems used to search, catalog, and store information found on Web

pages. In addition, Web communicators are constantly trying to determine how the search engines are operating. Web communicators want their Web pages to be presented at the top of the results seen by end users searching the databases.

I think of this as a type of game: the search engines game. Administrators of search engines are constantly changing the formulas and systems they use to catalog Web pages. And they are altering the ways the

information is presented to end users to make searching more useful. Meanwhile, Web communicators are trying to keep up and build their presentations to suit the systems in use by the search engines. The winner gets to be first in the search results. This is called good or high positioning.

Web directories do not create such a high-pressure situation. Web pages are reviewed and categorized by humans after being submitted by Web communicators. In this

situation, the best recourse for communicators is to create targeted presentations and then suggest to the directories how best to classify the information. Communicators can't really beat the game since the directory administrators make the final decisions. These listings are important, however, and should be used to promote a Web presence.

The other prevalent types of on-line promotion involve linking between sites. Linking is a function of the World Wide Web that makes it possible to

link any two pages or presentations existing on any public Web server. Links between content on different pages were the original reason for development of the Web and is the basis for its name.

Links promote a Web site by providing a direct connection to the site. For this reason, links are usually placed on high-traffic sites, meaning sites that get a lot of visitors. These links provide a connection to the site seeking promotion.

In these situations links are

usually paid for by the site receiving the link. A form of advertising has been developed using banners, or small space ads, on Web sites. The banner ads promote the company or product they are representing and serve as link to the Web presentation by that company or organization. These banners are created by the advertisers and targeted to audiences based on the visitors to specific Web sites. Companies and organizations promote their Web sites on other Web sites that engage similar audience

members.

Banner advertising is very similar to space advertising in traditional media. Banner ads are placed on sites with content targeted at appropriate audiences, just as space ads are placed in targeted publications. The Web sites for search engines, directories, and large media companies are some of the most visited Web sites. These sites can therefore charge the most money for banner ads linking from their sites. Banner ads also provide a direct response device by

offering immediate linking to the advertiser and engagement of that end user in the process.

Another linking technique involves sharing links between Web sites that are in some type of relationship. In this type of arrangement, links are swapped by Web sites that are trying to help promote each other. These types of links are prevalent for noncommercial entities that want to provide informational resources and communities on the Web. They are used less by commercial operations.

Links provide an exit from a Web presentation. An organization may have to spend money or other resources engaging an audience member. If a link off the Web site is provided, an engaged visitor has a way to leave the presentation immediately. This issue must be considered. Technical solutions using additional browser windows have also been developed to alleviate this issue.

Lab 6.1 Exercises

6.1.1 Understand Traditional Media Promotion

To demonstrate the opportunities for promoting an Internet communication effort available in traditional media, review examples in your experience. You may not initially be able to complete all of these questions. Return to this exercise later if needed. Promotional efforts in traditional media may become more apparent once you start

looking for them.

a) Where have you seen a reference to a Web site or e-mail address in a marketing piece you received in the mail?

b) Have you heard a Web site mentioned in a radio spot? If so, what was the subject matter?

c) Describe a Web site address from a TV advertisement.

d) What Web site address or e-mail contact have you seen in a space advertisement?

e) Have you noticed product packaging carrying a Web address?

f) Have you read an article or seen a mention of a Web site in a newspaper article or magazine listing?

g) How about in a billboard or other public signage?

6.1.2 Understand Search Engine Positioning

Log onto the index page

www.altavista.com. This is the interface to the comprehensive database of Web pages and other information indexed by this popular Web search engine.

Type in the four key words:
"peanut, butter, and jelly" with
no commas.

a) What information is returned by the database?

b) What is the first item listed in the results?

c) What information is included in the first listing?

6.1.3 Understand Directory Listings

Examine directory listings by logging onto the index page for www.yahoo.com.

Find the category heading for education. Click on the subheading for colleges and universities.

[a\)](#) What are some of your choices?

Click on the category identified as Colleges and Universities.

[a\)](#) What are most of your choices?

Click on the United States item.

[a\)](#) What choices are given now?

This is a set of more specific categories of universities and colleges in the United States.

Click on the letter M. Then click on Merrimack College.

a) What sites are listed?

Return to the index page and type "merrimack college" into the search engine for the site.

a) What are the results of the search?

Return to the index page at yahoo.com. At the bottom of the page click on the link titled

"How to suggest a site."

What are the three steps involved with **a)** suggesting a Web site for inclusion in the Yahoo Web directory?

Log onto the index page at www.submit-it.com. Review the material on this page.

a) What service does this company provide?

6.1.4 Understand

Banners and Buying Links

To begin examining on-line promotion using banner ads, return to the index page of www.yahoo.com.

- a)** What is the subject of the banner advertisement on the top of the page?

Hit the reload button on your Web browser to reload this page from the server.

a) Is the banner advertisement different?

b) Does the banner advertisement contain a direct marketing type of offer?

Click on the banner advertisement.

a) Where does the link take you?

Return to the home page of yahoo.com. Click the link to the "Computers and the Internet" category.

- a) What is the subject of the advertisement on the top of this page?

6.1.5 Understand Relationship Links

Log onto the index page for the World Organization of Webmasters at www.world-webmasters.org. Click on the link for partners.

- a) How can you summarize the links that are listed here?

Log onto the Web page at this address: www.phish.com. Link to the contacts page. This is part of the Web site produced by a musical group named Phish. Click on the link to Phish.net.

a) Where does this link take you?

Return to the www.world-webmaster.org/partner_index.htm and click on the link for Prentice Hall publishing.

a) Where does this link lead?

b) How is the appearance of this page different from the previous example?

Lab 6.1 Exercise Answers

6.1.1 Answers

To demonstrate the opportunities for promoting an Internet communication effort available in traditional media, review examples in your

experience. You may not initially be able to complete all of these questions. Return to this exercise later if needed. Promotional efforts in traditional media may become more apparent once you start looking for them.

- a) Where have you seen a reference to a Web site or e-mail address in a marketing piece you received in the mail?

Your answer will be based on your experience but might include the following.

A catalog that displays an on-line buying option. A letter package or postcard carrying a direct response offer with an e-mail or Web-based response device. A mailer for a large retailer that includes the corporate Web site address. A utility company may even include its Web address on the monthly billing statement, especially if it's providing an on-line payment option.

Answer:

Have you heard a Web site
b) mentioned in a radio spot? If so, what was the subject matter?

Your experience will vary, but here is mine.

I have noticed a growing number of radio spots that mention Web

Answer:

addresses, which is interesting considering that most radio advertising is targeted at people driving in cars. These spots usually involve high-tech companies and promotion of Web-based businesses such as amazon.com, mortgage.com, and priceline.com.

- c)** Describe a Web site address from a TV advertisement.

Your answer will again be based on your experience.

Web addresses are becoming prevalent on national advertising campaigns and branding efforts for many types of businesses. The large software and hardware companies, including

Answer:

Microsoft and Compaq, usually display Web addresses, which seems appropriate. Automotive manufacturers, large business consultants, and financial institutions have done so as well.

What Web site address or e-mail **d)** contact have you seen in a space advertisement?

Your answers will vary.

In nationally distributed magazines carrying both business and consumer content, more ads carry Web addresses than don't. In my local paper, ads for training companies, credit unions, photo development shops, printers,

Answer:

restaurants, and even a local tourist attraction all carry e-mail or Web response vehicles.

e) Have you noticed product packaging carrying a Web address?

Again, your answer is subjective.

I have noticed Web addresses on a variety of consumer and business products including office supplies, foods, and entertainment media.

Answer:

f) Have you read an article or seen a mention of a Web site in a newspaper article or magazine listing?

Your answer is based on your experience. Mine follows.

Though some journalists and editors do their own research about new interactive communication efforts, many rely on public relations (PR) activities that supply them with information and suggestions about these efforts. Public relations companies and consultants utilize press releases and media events to attract the attention of appropriate journalists. These efforts are expensive but can be rewarding if the media picks up a story in a well-read publication. Business publications are full of stories about new Web sites that were announced to the press using

Answer:

these methods.

- g) How about in a billboard or other public signage?

If you live in a major metropolitan area, you may have observed a billboard, bus, or taxi promoting a Web communication effort.

All of these examples demonstrate the use of traditional advertising as a method to promote interactive communication. All of the examples you have seen were executed to reach a particular audience and inform them of an Internet communications effort. Informing audience members,

especially customers or other end users that have an existing relationship with your company or organization, is an important part of the promotion process.

Sometimes this step is overlooked in the rush to engage new prospects on the Internet. But informing and communicating with existing relationships should be a priority before seeking new end users to communicate with.

Answer:

Some of the examples you have seen are part of ongoing advertising and branding efforts, and the general Web addresses were added to give additional return to the promotional investment.

Other examples may have

provided specific Web or e-mail addresses tied into specific marketing campaigns. In these situations a Web site may be designed to tie into a certain advertising effort or direct marketing offer. A different e-mail address could be used for every magazine an ad runs in to track the responses based on readership.

Regardless of the level of complexity, companies and organizations need to inform their audiences of Internet communication efforts. If the audience is reachable through traditional media channels, then this is the place to start.

6.1.2 Answers

Log onto the index page www.altavista.com. This is the interface to the comprehensive database of Web pages and other information indexed by this popular Web search engine.

Type in the four key words: "peanut, butter, and jelly" with no commas.

- a)** What information is returned by the database?

The database returns a list of Web pages that contain the words peanut butter and jelly.

This list of links, called results, was pulled from a massive database created by this company's Web search engine. This engine is an automated system that systematically searches, analyzes, and records text from every Web page it can find about once a month. More than a dozen different search engines are currently operating. Popular ones include Lycos, Excite, HotBot, and Infoseek. They are also sometimes called spiders or bots because they search and record text-based information on the Web automatically, following every

link they come across.

When you make a key word request, a database, called an index, containing all this stored information is searched and the results are displayed. But at this point in time computers are not very good at identifying context, only words. That's why these types of key word searches can be frustrating. They turn up every page that is stored in the database and contains the words you requested. The pages are then ranked according to relevance.

Getting a high position in this ranking is a challenging process for Web communicators. The ranking is based on several elements of each Web page involved. In addition, each Web

Answer:

search engine uses its own system to search, store, and rank results, and these systems often change.

One of the reasons for this constant flux is the efforts of the search engine administrators to develop more advanced methods of information indexing and search functionality. Great progress has been made in this area, and search engines are getting better at delivering appropriate results to end users. Recent advances provide answers to questions posed by the end user instead of just key words.

b) What is the first item listed in the results?

Your answer might vary slightly but the first item on the list probably contains the key words peanut, butter, and jelly in the title of the Web page.

Answer:

This title also serves as a link to the Web page. Although every search engine is different, most ranking is initially based on the key words in the title of the Web page. A title is very important for search engines. It serves as a headline for the rest of the page.

- c)** What information is included in the first listing?

A short description of this page

is included in the listing. Other information includes the URL address and creation or updating of the page.

The appearance of this listing information is another important factor in the ranking of this page in this search engine's results. The description of the page is copied from the description meta tag on the HTML source code of the Web document involved. (Meta tags are part of the HTML code that is read by the server but not displayed to the end user accessing a Web document. Meta tags and HTML are examined in other publications in this series.

*Understanding Web
Development and Web
Protocols, Prentice Hall PTR.)*

Depending on the search engine involved, the information that affects the ranking is the actual visible text from the Web document.

The search engines that index and display information in this manner all use proprietary algorithms to decide the importance, or weight, given to each of these factors when determining the results listings. How each item is weighted in the results process is also changed regularly.

Search engine administrators and Web page developers struggle to gain the upper hand over each other in this ranking game. I would only suggest getting involved in this game if your Web site business model is

wholly dependent on being found by search engines and listed in the initial results presented to end users. And if that is the case, I suggest looking for additional promotional opportunities. I don't believe this game can truly be won.

A number of software products and services have been developed that claim assistance in this game. But a reliable source has informed me that there is really only one way to play this game and get a high position in search engine results. It involves learning each search engine's weighting algorithm by analyzing the results of a search on that engine. This is accomplished by looking at the key word density using a software tool called a text

Answer:

analyzer.

This process will show you the weight of particular key words in high-ranking documents.

Reproduce the weight in your own documents and you should get the same high-ranking results on that engine. Of course, you'll have to repeat this process on a regular basis for each of the dozen or so search engines to keep up with the constantly changing rules of the game.

One practice being used by some Web publishers is called page swapping or page redirection. This involves the development of specific Web pages to match the needs of search engines during their inquiries and rank high in their

results. However, these Web pages are not served to end users and instead redirect users to a different page. A refresh meta tag also accomplishes a similar situation, creating a doorway page for search engines that immediately reloads when the end user requests the page.

This process is very controversial in the Internet community, and many search engine administrators will blacklist a Web site if this practice is detected, banning inclusion in the database. Search engines are against the practice of searching, indexing, and providing links to pages that don't carry the content the end user is searching for.

Again, this search engine game is very complicated. The rules of the game are constantly changing and the results are questionable at best. Most companies and organizations would not count on their phone directory listing to be their primary method of promotion in the marketplace. That's basically what search engine listings provide.

Another interesting aspect of the search engine game is the development of Web sites that provide searches of multiple search engine databases through one interface. A popular search of searches can be accomplished at www.dogpile.com.

6.1.3 Answers

Examine directory listings by logging onto the index page for www.yahoo.com.

Find the category heading for education. Click on the subheading for colleges and universities.

a) What are some of your choices?

A new listing of categories and a list of Web sites that don't fit well into categories.

This Web site operates an extensive Web directory service. Similar to a combined table of contents and an index for a book, information on Web sites is stored, referenced, and cross-referenced by category in a database.

This directory and others like it list Web sites, not just Web documents. It differs from a search engine because it does not search the Web on its own. Instead, this database is dependent on the submission of Web sites for consideration, categorization, and indexing.

This process actually involves human consideration of the Web sites involved. Humans review each submission to decide how a Web site will be listed in the

Answer:

directory and how it will be cross-referenced.

Click on the category identified as Colleges and Universities.

a) What are most of your choices?

The majority of the choices is an extensive list of countries.

The Web site information groupings are organized in a hierarchical fashion. This means that information about Web sites and links to them are stored in categories and subcategories from general to specific. In this

Answer:

case, the category for colleges and universities is subdivided into specific country subcategories.

Click on the United States item.

a) What choices are given now?

Letters and a number of other groupings, including private, public, men's, and women's colleges.

Answer:

This is a set of more specific categories of universities and colleges in the United States.

Click on the letter M. Then click on Merrimack College.

a) What sites are listed?

Yours might vary but should include at least two options: the Merrimack College Web site and a site discussing men's hockey at Merrimack College.

These Web sites are the subject of this directory search: the college's official site and an unofficial site discussing the college's highly competitive hockey team. Note that the Merrimack College Web site is actually listed based on its physical location in North

Answer:

Andover, Massachusetts. It is cross-referenced as a college in the education categories. The hockey site is actually categorized under sports and recreation and cross-referenced to education as well.

Return to the index page and type "merrimack college" into the search engine for the site.

a) What are the results of the search?

Your answer may vary but should include the same two sites for the college and the hockey team.

This search turned up links to sites already stored in the directory's database of Web sites. Again, these sites were submitted to the directory and categorized by humans, not found by search engines.

Answer:

Return to the index page at www.yahoo.com. At the bottom of the page click on the link titled "How to suggest a site."

a) What are the three steps involved with suggesting a Web site for inclusion in the Yahoo Web directory?

1. Check to see if your site is already listed in Yahoo!. 2. Find the appropriate category in Yahoo!. 3. Suggest your site from the appropriate category.

Answer:

This Web document explains the steps involved with submitting a Web site to this directory for review, inclusion, and categorization by its staff. Click on the link to the "List of Important Pointers" to learn more about how submitted material is handled.

Log onto the index page at www.submit-it.com. Review the material on this page.

a) What service does this company provide?

This company helps promote Web sites by submitting Web site listings to hundreds of directories and search engines.

This company charges a fee to distribute Web site listings on your behalf. It submits Web site listings to search engines, which will then come and search your site, and Web directories. A list of the hundreds of search engines and directories that are notified is available on the site as well.

Of course, each directory and search engine uses a different process to store and present this information to its end users.

This service, and others like it, will also update this information and provides reports on the status of your listing with some of the popular search engines.

A number of software products are also available to automate

Answer: the submitting process. They will submit listings at both Web directories and search engines. Some claim to submit Web site listings to over 900 different Web directories on your behalf.

Utilizing either of these of these methods to spread the word about a Web communication effort is an excellent way to begin reaching the Internet audience. And both save you time and effort in promoting your Web site on-line.

Most search engines and directories do not necessarily reach targeted audiences. But a Web communication effort should be included in them so prospective audience members can find your site if they are looking for the solutions you provide. Specific directories can also be investigated that may cater to a more specific audience that you wish to reach.

6.1.4 Answers

To begin examining on-line promotion using banner ads, return to the index page of

www.yahoo.com.

What is the subject of the
a) banner advertisement on the
top of the page?

*Your answer will vary based on
your experience. Mine follows.*

I saw a direct response
advertisement for an
organization called cars.com.

Answer: When this Web page was shown
to me, this advertisement was
included in the presentation. It
was probably one of several
banner ads that are being
displayed by this site
simultaneously.

Hit the reload button on your Web browser to reload this page from the server.

a) Is the banner advertisement different?

Yours may be different, but the answer is probably yes.

A different banner advertisement is presented each time a new user logs onto the site or when the page is reloaded from the server. The Web site is showing different ads based on a rotation of some kind so multiple advertisers can be presented by the site in the same time frames. The same practice is

done in TV and radio advertising.

The display of this banner ad is called an impression. One end user saw this banner one time. The banner theoretically made one impression on one person.

Many Web sites charge advertisers on a cost-per-impression basis. This is called a Cost per Thousand (CPM) model, which is a term borrowed from traditional direct marketing list-buying terminology. Advertisers must pay the Web publisher a set amount of money for a set amount of impressions.

Answer:

The published rates for the myway.com Web site, which engages a national audience of consumers on the Web seeking

a personalized information resource, are between \$25 and \$35 for 1000 impressions. These numbers are discounted in quantity and vary widely based on the audience of the site involved, its traffic levels, and relationships between advertisers and Web sites.

This pricing structure may not be the best case scenario for promoting a Web site. Just because the banner ad is displayed does not mean that end users will respond to the offer on the banner ad.

Does the banner advertisement contain a direct marketing type of offer?

b)

Your experience will probably differ from mine.

The banner ad did contain a direct response offer. The ad stated, "Win a 1-year car lease!" This offer acts as an enticement for me to click on the banner to find out how I can win. Banner ad copy is usually written to gain an immediate response from end users who see the ad. Banner ad creative efforts are extensive and usually involve multiple presentations for the same campaign.

Answer:

Click on the banner advertisement.

a) Where does the link take you?

Your answer is based on your situation. Regardless of the specifics, the link took you to a Web page for the advertiser who was running the banner ad.

This Web page may be a specific presentation targeted at the audience responding to this promotion or offer. It might also be the home page for the company or organization. It might be another page or service offered by the Yahoo! company.

By linking to this Web page you have completed a click-through. You clicked through the banner ad to its sponsor and responded to the offer.

Answer:

Another method Web sites use to charge advertisers to display banner ads is on a per-click-through basis. In this model, the advertiser pays the Web site for every response or click-through that is generated by the banner ads on that site. Costs for this type of model are currently running between \$.01 to \$.15 for each click-through. This is a better pricing model for Web marketers than straight CPM pricing as marketers only have to pay for results instead of space ads.

Return to the home page of www.yahoo.com. Click the link

to the "Computers and the Internet" category.

a) What is the subject of the advertisement on the top of this page?

Your answer will vary, but the ad banner probably has something to do with technology.

This ad was intentionally placed here to reach an audience interested in technology issues. The ads in this and other sections of the Web directory are targeted to particular audiences. Banner advertising on the Web provides opportunities for promotions to be placed on

pages carrying related content. This means that end users interested in particular topics or information can be targeted with offers based on those topics. For example, a test preparation company can place ads on information pertaining to college entrance exams.

Purchasing banner advertising space is similar to buying space ads in traditional publications. A number of companies currently act as brokers in the

Answer:

marketplace and can place banner ads on different Web sites for a set amount of money. Some brokers represent groups, or networks, of Web sites. Others represent marketers.

Fortunately, it is very easy to test creative content, offers, and

placement of banner ads on Web sites. Due to the immediate and dynamic nature of Web communication, the success or failure of banner ads becomes apparent quickly. Banners can be pulled from unsuccessful sites. Creative approaches can be tested simultaneously and the ones that work can be used to replace the ones that don't.

Overall, the use of banner ads to buy links and generate response to an Internet communications effort is an effective and expensive proposition. This type of on-line promotion may be necessary if the target audience for your effort is to be found on the Web.

6.1.5 Answers

Log onto the index page for the World Organization of Webmasters at www.world-webmasters.org. Click on the link for partners.

- a)** How can you summarize the links that are listed here?

Your answers will vary. Here's mine.

This is a list of links to partners and organizations that the World Organization of Webmasters has

some type of mutually beneficial relationship with. Most support the efforts of the organization in some way through promotions, financial assistance, or other means.

These links are included on the site to provide on-line promotion for these companies. This service is provided in return for the nice things these companies do for WOW.

Answer: Besides playing the search engine and directory game and buying links through banners on popular Web sites, another way to promote a Web-based communications effort is to seek links from other Web sites that you have a relationship with. These could include vendors, partners, affinity groups, and

associations.

The nature of linking, however, means links only go one way. Links to your site have to be provided by the Web site linking to you. This may involve paying a Web site for a listing. Or it could involve shared linking or swapping. This is the Internet version of "I'll link from mine if you'll link from yours."

Log onto the Web page at this address: www.phish.com. This is the Web site produced by a musical group named Phish. Link to the contacts page. Click on the link to phish.net.

a) Where does this link take you?

Your answer will vary but could include something like this: To the index page at www.phish.net, a Web site serving an on-line community for fans of this band.

Scrolling down the page, you can find several links to the Official Phish Web Site on this index page. It is also linked twice in the disclaimer on the bottom of the page. This is an example of a shared link. Two sites with a relationship have swapped links with each other. In this case, the band is supporting the efforts of an organized fan community and the fans are enthusiastically (some may say extremely)

Answer: supportive of the efforts of the band. Many other links are listed on this page as well, and most of them are provided as part of shared link arrangements between the site's creators as well.

Links can also be shared in the form of banners. Several programs exist in the marketplace that provide opportunities for Web communicators to exchange banners with each other. These banners will provide a similar type of shared link functionality. The Submit It service discussed previously is related to another service called Link Exchange, which arranges these types of situations.

Return to the www.world-webmaster.org/partner_index.htm and click on the link for Prentice Hall publishing.

a) Where does this link lead?

This link takes you to the home page for Prentice Hall.

Answer:

This company is the training materials publishing partner for the World Organization of Webmasters and the publisher of this book.

b) How is the appearance of this page different from the previous example?

In this example the Prentice Hall site opens within the browser window of the WOW site. In the previous example, the link brought us from the [Phish.com](#) site directly to the index page of the [Phish.net](#) site.

In the WOW example, the link brings up the Prentice Hall Web site while keeping end users engaged with the WOW site. This is done using frames as part of the HTML document, allowing different sections of the browser window to present different information. In other situations the linked site appears in a separate browser window. In the band and fan example, the link provides an exit from one site and an entrance to another site.

Answer:

This can be a negative situation for Web marketers and communicators, who are attempting to engage an audience. Providing an exit for an end user to leave a site may not be a good idea if a lot of money and effort was spent to get that visitor. On the other hand, if the shared links bring a lot of traffic, then that contribution to promotion of the effort must be considered as well.

Lab 6.1 Self-Review Questions

In order to test your progress,

you should be able to answer the following questions:

What is the best way to use traditional media to promote a Web presence?

1. _____ Create cool TV ads that win advertising awards.

- _____ Take out space ads in the local paper.

1)

- _____ Hire expensive PR people to shmooze for you.
- _____ Utilize the appropriate media to reach your target audience and inform them of your presence.
- _____ Tell your friends.

How do you win the search engine game?

1. _____ **By receiving a check in the mail**

2) ● _____ By receiving a high position in search engine results

● _____ By buying a lot of banner ads

● _____ By answering your door and seeing Ed McMahon

How do directories receive suggestions for Web site listings?

1. _____ **They use automated software to search the Web.**

● _____ They solicit input from focus

3) groups.

- _____ Sites are submitted by Web communicators and submission services.
- _____ Anonymous letters

How are banner ads similar to space advertisements?

1. _____ They provide promotion for a Web site or product.

- _____ They are paid for by the advertiser.

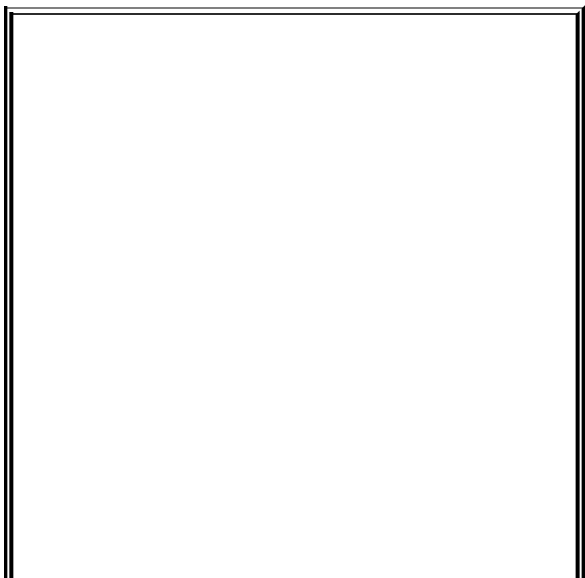
4)

- _____ They are placed on Web sites that have a targeted audience wanted by the advertiser.

● _____ None of these

● _____ All of these

Lab 6.2: Measuring Internet Communication Activities



Lab Objectives

After this Lab, you will be able to

- [Understand Web Site Usage Reporting](#)
- [Understand Cookies that Compile](#)
- [Profile People](#)

In this lab, we will discuss three ways to measure activity in an Internet communications effort. These three methods appear in the order of quality. Each method provides useful

information. Information that is specific to an individual audience member is more useful for marketers as it provides more opportunities to develop relationships based on individual wants, needs, and desires. But all of these methods provide data that can be used deliver targeted presentations to audiences.

The first method involves reviewing general information from server log files and reports. This is a useful method but is least effective from a marketing and communication

perspective. The second method uses a software tool, called a cookie, that is built into the client-server computing model, which allows servers to track the activities of an individual PC. The third method, which is the most effective measurement tool, involves the review of the communication actually taking place through a Web communication effort.

The first method uses server logs to review activity on a Web site. Every time a client computer communicates with a

server via the Web, a record of the transaction is recorded by the server. These log files contain a lot of useful information for measuring Web activity. This information can then be reported by the server itself using a reporting software tool. A number of third party services can also be utilized to track server activity and publish easy-to-read reports for Webmasters. A new tracking service called superstats.com is used as an example in this lab.

Captured and reported data can include many topics:

- Page views records of what and when individual pages were viewed by end users and the history of this activity
- Unique visitors the number of individual visitors to a page or site by hour, day, or month
- Referring documents the pages that visitors linked from outside and inside the site
- Search engines that

provide links to your site

- The operating systems of the end users' computers
- Browsers and plug-ins being used by the end users
- The domain names of the end users' computers
- Origin countries and languages being used by the end users

All of this information is useful

for Web communicators. The popularity of a Web page can help determine the needs of a Web site audience and provide opportunities to improve a presentation. The link records can help determine how a visitor is interacting with a presentation and how it can be improved. Usage numbers can be compared to promotional activities. Client computer information is useful when improving presentation content.

The client-server computing model also provides another

useful tool for tracking Web activity. A function built into the client and server software packages developed by Netscape and Microsoft allows Web communicators to set cookies into the client software when end users access servers. These cookies are text codes generated by the server and stored in a file on the PC. Cookies act as individual identifiers or name tags. When a PC logs onto a server using this method, the server checks for cookies. If one is present, the server can track the

activity of that PC over time. If one isn't present, the server will try to create a new one. This process can be blocked by the end user, however.

This information is useful for marketers as it provides opportunities to track individual users of a Web site. In the first chapter we discussed the value of cookies as used by [amazon.com](https://www.amazon.com). These individual identifiers can be combined with usage information to create comprehensive pictures of individual end users and their activity on a Web site.

Historical data can be compiled to document users' wants, needs, and desires over time.

Unfortunately, this method does not immediately identify the actual person involved in the communication, just a PC. In the [amazon.com](https://www.amazon.com) example, the cookie identifier was matched with the end user account information to provide personalized greetings when I logged onto the Web site.

The best kind of measurement involves the review of actual communication completed with

individuals over the Web or net. Direct communication with individual audience members is the purpose behind this type of communication. Measuring this type of activity involves reviewing the capturing of data and contact information from customers or prospective customers over time. The number of individual profiles built from direct, individual communication is the best type of information to measure. It is the most useful for building relationships.

Success or failure of a Web site

or Internet communications effort should not be based on measurement of activity. Success is based on the goals of the effort, the information exchanges, and the audiences involved. The fulfillment of wants, needs, and desires is the motivation for marketing. Fulfillment of these issues via the Internet is the ultimate measurement of success.

Lab 6.2 Exercises

6.2.1 Understand Web

Site Usage Reporting

Let's look at an example of this type of activity. Log onto the Web site at this address: www.superstats.com. This site describes a service available to Webmasters that will track the usage of a Web site using HTML code embedded into the Web site's documents. This service stores and reports that information via a Web interface.

This service is provided free to

Webmasters in exchange for the display of a banner ad on the Web site being tracked. This provides promotional opportunities and banner sales opportunities. This service may or may not be beneficial for Web marketers depending on the click-through opportunities and response of these banners. A paid tracking service is also available from superstats.com and others.

On the index page, click on "Examples" or "Demo."

- What three categories of information
- a) topics are tracked and reported by this service?
 - b) Why is this information helpful for Web communicators?

6.2.2 Understand Cookies that Compile

To examine a more specific measurement tool, conduct a search on your PC for a file with the word "Cookies" in it. This can be done with the Find

tool in Windows or Find File on a Mac. Once the file is located, open it with a text editor.

a) What does this file contain?

b) Is the information gained by a Web server setting and tracking cookies more helpful than information from usage files?

6.2.3 Profile People

Consider again the discussion in [Chapter 1](#) regarding

[amazon.com](https://www.amazon.com). In that first chapter we discussed the process involved with purchasing a book from this on-line merchant.

What specific customer information can **a)** be captured and stored by this company?

b) What is the best kind of measurement discussed in this lab?

Lab 6.2 Exercise Answers

6.2.1 Answers

Let's look at an example of this type of activity. Log onto the Web site at this address: www.superstats.com. This site describes a service available to Webmasters that will track the usage of a Web site using HTML code embedded into the Web site's documents. This service stores and reports that information via a Web interface.

This service is provided free to

Webmasters in exchange for the display of a banner ad on the Web site being tracked. This provides promotional opportunities and banner sales opportunities. This service may or may not be beneficial for Web marketers depending on the click-through opportunities and response of these banners. A paid tracking service is also available from superstats.com and others.

On the index page, click on "Examples" or "Demo."

a) What three categories of information topics are tracked and reported by this service?

Your answers will vary but should include the following topics: site traffic reports, visitor profile reports, and marketing reports (a very loose use of this term).

Without going into too much detail, a lot of information is available from looking at the usage of a Web site by end users. All of the information presented in this tracking service can be also gleaned directly from the Web server that is hosting a Web site.

Every interaction between a server and a client computer is

Answer: recorded, or logged, by the server. Generally speaking, these logs record hits. A hit is the term used to describe a file download from the server to the client. These logs can be read directly but are not very simple to decipher and vary according to operating system and administrator.

Software products and services like the one shown here capture this log data and generate reports. This exercise is utilizing this service and its demonstration to show the types of information available from server log files.

b) Why is this information helpful for Web communicators?

*Your answers will again vary.
Here's mine.*

This type of information is useful to measure the traffic activity on a Web site and to begin gauging the effectiveness of the presentations being made on it. These reports give a rough idea as to what end users are doing on your site. Deductions can be made about audience characteristics and what is working on a site versus what is not working.

For example, historical data can be compared to site promotion activities to see what efforts are successful. Individual page usage can identify what pages and subjects are popular and effective for the audience.

Internal link records can demonstrate how users are interacting with your presentation and how it can be improved to meet their needs. External link records can tell you where users are coming from and influence decisions about on-line promotional activities. Client computer operating systems, browsers, and plug-in usage can help determine how best to present information to the audience. Domain addresses can help indicate if users are logging on from work or home.

It is important to note that none of this information tells you exactly who you are communicating with, just general activity. This type of information is valuable but not as useful as more specific

Answer:

information about individual end users. More specific ways to measure Web site use are discussed next.

6.2.2 Answers

To examine a more specific measurement tool, conduct a search on your PC for a file with the word "Cookies" in it. This can be done with the Find tool in Windows or Find File on a Mac. Once the file is located, open it with a text editor.

a) What does this file contain?

Your answer is subjective. Mine follows.

This file contains a series of text messages that represent cookies. If this file is empty, then this machine has not accepted cookies set by Web servers.

If the file contains text, then your PC has allowed cookies to be set. It probably looks like this: On the left side of the document are Web site addresses. On the right side of the document are a series of corresponding code strings.

Together this information acts as a kind of marker or identifier for this individual PC. This

Answer:

information was written here by the Web servers that are identified on the left side of the document. The code string is unique to this machine. Every time this machine logs onto the same server, the server checks for cookies. If a cookie is present here already, the machine can track the activities of this PC on that server. If a cookie isn't present, it creates one and writes it to this file. Cookies can be blocked and erased from a PC by an end user as well.

This cookie identifier allows a Web server to track this particular PC's activity on the server. Every repeat visit provides more information about the wants, needs, and desires of this PC.

b) Is the information gained by a Web server setting and tracking cookies more helpful than information from usage files?

The answer is yes.

This information is more advanced than the information taken from usage records because detailed information on an individual PC is captured. When combined with the information discussed in the previous exercise, a more in-depth picture of audience members can be created.

Answer: Granted, the server doesn't track a person. Cookies track

PCs, and more than one person can use a PC. But data generated by tracking the movements, history, and activity of individual PC users is valuable for developing customized, engaging presentations and measuring results. The only thing more valuable for building relationships is to know the actual identity of the end user involved.

6.2.3 Answers

Consider again the discussion in [Chapter 1](#) regarding amazon.com. In that first

chapter we discussed the process involved with purchasing a book from this on-line merchant.

What specific customer
a) information can be captured and stored by this company?

Your answer will be clouded by all the information you've covered since that discussion, but it might sound something like mine.

When a customer purchases a book or other item from [amazon.com](https://www.amazon.com), the customer's name, contact, payment, and shipping information is captured

to process the order. In addition, specific product preferences are captured from the customer by providing opportunities to specify wants, needs, and desires. Remember the option for selecting your interests, likes, and dislikes on the [amazon.com](https://www.amazon.com) site? That site even suggested products based on the preferences of other customers.

All of this information is captured in a database and is updated with each visit or purchase. The company can then build a profile for each individual person. Relationship marketing can be developed, delivering offers to the specific wants, needs, and desires of this person.

What is the best kind of

b) measurement discussed in this lab?

Your answer will vary but should identify individual responses from customers or prospects as the best kind of information to capture and measure.

Site usage reporting and cookie tracking are both valuable for measuring the results of a Web communication effort. But the best kind of measurement involves reviewing actual responses from prospective or current customers.

This is why we initiated Internet communication: To communicate directly with an audience. Therefore, the measurement of our success is

based on the amount of direct communication we actually accomplish. Capturing information about the actual people we are communicating with allows us to continue the communication and to build profiles of the people we are communicating with over time.

Answer:

Knowing how many people looked at a Web page is good. Knowing if the same people came back again and when is better. But knowing who they are and what their wants, needs, and desires are is the best.

With this information we can use Internet communication to build relationships. Capturing information from our individual audience members helps us find ways to serve their needs.

The actual success of an Internet communications effort can best be defined by looking at our original goals discussed in [Chapter 2](#). If we are reaching them and communicating based on our original plan, then we are succeeding.

Lab 6.2 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

Traffic reports from a Web server are useful for gauging what?

1. _____ **The software packages in use by clients**

- 1) ● _____ Success of a promotional effort
- _____ The use of color on a Web site
- _____ All of these
- _____ None of these

Link histories and referring pages provide what information?

1. _____ **The software in use by clients**

- 2)** ● _____ The record of a visitor's travel through a presentation
- _____ A record of a link provided by an on-line promotional effort
- _____ Both b and c

Cookies can identify the end user of a PC being tracked.

3) 1. _____ **True**

- _____ False

The best kind of information for measuring Internet communication is captured from what methods?

1. _____ **Reading server usage files and reports**

4) ● _____ Tracking cookies and building profiles

● _____ Reviewing information captured from direct communication with end users

● _____ None of these

Chapter 6: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

Identify what audience you need to

1) inform of your effort. How will you promote the effort using traditional media channels?

Identify on-line promotional activities.

2) Is it necessary to play the search engine games, or will submission efforts be enough to promote your site?

Identify linking options. Are shared

3) linking options available? How will you utilize paid banner advertisement?

Consider measurement options for your effort. What information will you

4) retrieve from server logs? What information will be captured to profile end users?

Chapter 7. Internet Marketing: Legal Issues



We have always known that heedless self-interest was bad morals; we know now that it is bad economics.

Franklin Delano
Roosevelt

Chapter Objectives

In this chapter, you will learn about

- ✓ [Establishing and Documenting Agreements in a Contract](#)
- ✓ [Developing Web Content](#)

The objective of this chapter is to provide you with enough information to know that laws do apply to activities on the Web and to know that even common situations may have significant legal implications. Most of the situations discussed

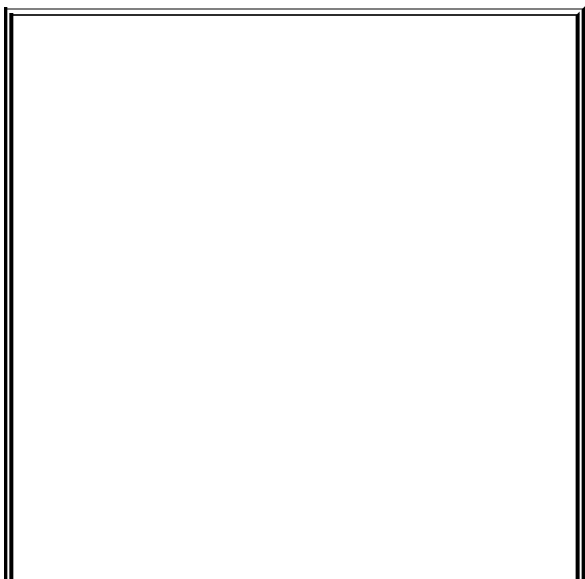
in this chapter are based on U.S. law, although international laws apply. International law is a complex area outside the scope of this book.

This chapter is not intended as a substitute for legal advice, nor does it contain professional legal advice. An attorney is best suited to respond to the specific circumstances of your situation.

Legality and illegality are based on the specifics of each unique situation combined with federal, state, and local laws

and regulations and current case law. Do not hesitate to go to an attorney, and the earlier in the situation, the better. A good attorney prefers to practice preventative law rather than trying to practice much more expensive damage control in a courtroom. If your target audience is outside of the United States, select a law firm with expertise and experience in the laws of that country.

Lab 7.1: Establishing and Documenting Agreements in a Contract



Lab Objectives

After this Lab, you will be able to

- [Describe a Contract and Its Three Basic Elements](#)
- [Evaluate a Contract](#)

Before you dive eagerly into your next (or first) Web site development project, as either an employer or as an independent consultant, you need to develop a strong foundation for that project. This is done through a development

contract. It should describe what will be accomplished, how it will be accomplished (in general, usually, not the "bits and bytes"), when payments are earned and due, and who owns what. (Who owns what at the end of the project is extremely important, as you will see in [Lab 7.2](#).) As questions arise during the implementation process, the contract will be the baseline of what was intended. If you are the employer, *don't pay* for any coding without it. If you are the developer, *don't do* any coding

without it.

Contracting for Success

A contract is the basic building block of business relationships. Fortunately or unfortunately, life cannot be conducted without contracts, both written and verbal. We enter into contracts all the time, whether we know it or not, and we will be more successful if

We are aware that we are making a contract.

We know the rules that apply.

We understand the negotiation process.

If everything goes well, then the contract is just a piece of paper (or several!) with signatures on it. If things do not go well, or if a question arises during the course of implementation or paying for the service, then the contract is extremely useful (or *should* be). A written contract is more effective for obvious reasons ("I

never agreed to *that!*"), and is highly recommended. In general, very few businesspeople object to contracts because they know that contracts usually prevent more misunderstandings than they cause, and a good fair contract protects all the parties. Of course, signing a contract will not make an honest person out of a dishonest one, but it can describe the penalties, or "remedies," if the terms and conditions ("t's and c's") of the contract are not met.

Often, the process of documenting the "deal" in the contract is extremely useful by itself. This is where everyone's assumptions should be described and examined. This documentation process helps eliminate many points of confusion that could become nasty disagreements if delineated *after* the project is started. The contract should truly reflect an up-front agreement among the parties about what is going to happen.

At a minimum, a Web development contract should

describe

Who has ownership, and when the ownership transfers

What is to be accomplished

Who is responsible for doing what

The time frame, or time frames

The price and terms of payment

With everything "out on the table," the parties should have a clearer understanding about what is going to happen and what is expected of everyone. There should be less confusion and more cooperation. The key is to agree on the terms and conditions. If there is something you do not like about an aspect of the deal, discuss it and negotiate something with which you can agree. Or walk away.

Contract Elements

Traditionally, a contract is defined as an agreement among two or more parties, who know each other, and who promise to perform a transaction with each other. This is fairly clear in the real world. You know when you are buying a house, leasing an apartment, renting a car, or purchasing something with your credit card. In the real world, you deal directly with the people involved the realtor, the landlord, the rental car agent, or the store salesperson. It isn't as clear in

the virtual world of cyberspace.

A contract is comprised of three basic elements. If one of the elements is missing, then there is no contract. If all of the elements are in place, we have a contract.

1. An ***offer*** made by an offeror **the person (or entity) extending the offer**
- An *acceptance* made by an offeree the person (or entity) accepting the offer

- *Consideration* an exchange of something of value, like money

You participate in contracts all the time, as an offeree or an offeror. The process is so well established in our world that we participate without even being aware that we have made and executed a contract. For example, you go to a computer store to shop for a new printer for your office. The store is making thousands of offers, constantly, by putting merchandise on display with

price tags attached. The store hopes that offerees will come along and will accept its offer and exchange money for the products for sale.

Suppose that you find the exact printer that you want at the store, but the price is too high and the only one left in stock is the one on display. So you take the "floor sample" printer to the salesperson and make an offer to purchase that specific printer at a price lower than the posted purchase price. When you do that, you have exchanged roles with the store.

You have become the offeror (by offering to purchase the printer at a price lower than the posted price) and the store has become the offeree. If the store clerk accepts your offer by agreeing to accept the lower price, you give the clerk your credit card; you sign the sales slip at the agreed-upon price; and you leave with your new printer. The transaction is completed. The store offered you the item at a specific price. You rejected that price and made a lower counteroffer. The store accepted your counter

offer, and the transaction was completed. You actually negotiated a lower price in exchange for what could possibly be a less valuable item the display model.

Oral and Written Agreements

A contract does not have to be in writing to be a contract. There is such a thing as verbal contract, but it is usually much harder to enforce than a written contract.

Visible and Invisible Contracts

Frequently, you sign some kind of slip of paper as you complete a transaction (like the credit card charge slip). That's a contract, or part of it! Often, you don't even notice the contract and its terms and conditions because they are such a common part of your daily life.

Some contracts are more noticeable than others. The contract is painfully obvious

when you buy a house (tons of paperwork and lots of lawyers), less obvious with an apartment lease or car rental agreement, and nearly invisible with a charge slip. Hopefully, you read and understand *all* of them before you sign any of them. However, it is not easy to read all of the documents associated with the house purchase because much of the language is written by lawyers specifically for lawyers, with volumes of case law behind it all (that's why the lawyers are there).

The contract is also obvious, and usually much less intimidating, with the apartment lease what size is the security deposit required, when do you get it back, what kind of apartment damage can result in losing that deposit, etc. The contract is at least partially obvious with the car rental agreement, where you initial your option choices (so that it can be proven that you did agree to those choices), offer your credit card, and sign at the bottom. The contract is much less obvious with your

credit card slips, which usually do not appear to contain much text. In most cases, the real terms and conditions associated with your credit card purchases are written in *very tiny print* on small slips of paper included with your monthly statement or your actual credit card application.

Enforceable Contracts

There are some requirements associated with contracts, to make them enforceable by a

court if the need arises.

- An enforceable contract must be "legal." For example, movies have the bad guys "put out a contract" on one or more of the good guys, as though they were having attorneys draw up contracts for the bad guys to sign, documenting the terms and conditions for killing someone. While that situation is more of a Hollywood fantasy than anyone's reality, if such a

contract was drawn up, it would not be enforceable by any recognized court of law. It is not legal, fortunately, to kill anyone, so such a contract would not be legal.

- Another requirement of enforceability is that some contracts must be in writing, signed by both parties. This makes sense. How could a court, or anyone else, determine who is right or wrong in a situation when the contract

was verbal? Possibly, it could be video taped in front of unimpeachable witnesses, like a room full of U.S. Supreme Court justices, but such circumstances would be extremely rare for most people. It would be time consuming and expensive to prove that contract's terms and conditions, if you could. It is much easier to put those terms and conditions in writing.

- In addition, minors (usually

defined as younger than 18 years of age) cannot participate in contracts, at least not enforceable ones. While children and teenagers do shop, frequently using their parents' credit cards for payment, they cannot *legally* do so.

Negotiation Preparation

When beginning any type of business relationship with a client or vendor, the project

and financial arrangements are usually informally discussed first. But it's a good idea to begin formal negotiations over a contract as soon as possible. In the hype and vapor world of Internet communication, discussing what, when, and how much is a very good idea. And since anything is possible using this communications method, defining projects and responsibilities is very important.

Once you've begun developing a new situation with a client or vendor and need to move

forward, help your attorney draw up the contract that you want, or review a contract submitted to you, by outlining the "deal" and the important issues. Describe your goals, what you need to have included, what should not be included, etc. In addition, if you already have a contract draft from the other party, read it and highlight clauses that bring up questions or concerns.

The following are important points for everyone in a contract negotiation:

- 1. Whenever possible, be the party that originates the first draft of the contract. Yes, it *will* be more work (and, probably, expense). However, as a consequence, you will know the contract extremely well, and you will have included all of your important requirements (as well as some of your "wants" and a couple of "give aways" for the negotiation).**

Be sure to enlist the assistance of an attorney to draw up the contract. Do-it-yourself contracts (unless you are an attorney), or using a cookie-cutter contract out of a book or some software, can be dangerous because they are not developed with your situation and your point of view in mind.

Be prepared to have the other party dispute some contract clauses and come back to you with a

revision to your draft contract. Ask them to highlight the changes that they made, and then read the contract, again, completely to see if any other changes were made. Again, the wisest way to proceed in such situations is to have your attorney review the revised contract, too. A change in words or even punctuation can appear meaningless to you but may, in fact, be significant.

If the other side prepares the first draft, you need to read it very carefully and thoroughly. Highlight anything that confuses you or that you do not like (because it is not fair to you, not doable, not realistic, etc.), and take it to an attorney for review. With your attorney, develop compromise positions to present to the contract's originators that address your issues or concerns.

Over time, you can develop your own standard contracts that contain the terms and conditions with which you are comfortable and under which you usually work.

- Only sign contracts that you have read completely (and understood!) yourself, preferably after your attorney has read and discussed them with you.
- When you make a

concession in negotiation (like speeding up delivery, if you are the seller), ask for one from the other party in exchange (like a more complete specification or a single point of contact who will be responsible for answering all of your questions within 24 hours).

- Be prepared to walk away from an unfair situation or an unprofitable deal. Know what your "deal killers" are those terms and conditions that are completely unacceptable (non-negotiable) for you. If the other

side insists on one of those, walk away from the deal. Usually, a compromise position acceptable to both parties can be reached. Sometimes the other party will insist on something that is totally unacceptable to you, as a negotiation ploy to see how badly you want the deal. If they see that you are seriously ready to terminate the negotiation and walk away from the deal, they *may* make a concession. But they may not! So you must truly be prepared to walk.

Also know what your price limit is, recognizing that things like payment terms, content source, or technology may affect the actual cost. It is most rational to think in terms of the overall total cost of the project, including not only the purchase price but also cost of maintenance, hosting, software, etc. Figure out your limit (as either the buyer or the seller), and know that going beyond that limit will turn the deal into something that you cannot afford.

- Keep a "poker" face, in most negotiation situations (think how the car salesperson's eyes light up when you exclaim how much you love the new car!). Something that may be very important to you may not be important to the other parties. However, if they know how important it is to you, they may expect a large concession from you in exchange for it, regardless of its cost or actual importance to them.
- Don't start a negotiation with your "final" position (or

best offer). People usually expect to do some negotiation in a Web site development effort (and most other contracts as well), so build in some maneuver room for yourself.

The following are important points for the sellers in a negotiation:

- 1. Don't automatically drop your price as your first concession. Research has shown that price is *not* usually the buyer's biggest concern (or it**

shouldn't be). Buyers are usually more concerned with quality, reliability, and time to delivery, although every buyer and every situation is different. If the buyer indicates that the price is too high, ask what deliverable he or she would like to leave out to lower the price, assuming that your price is a fair one for the effort.

- *Want* the business or the

contract, but do not *need* the business! Know what your deal killers are and what your bottom line price is. If those are reached or crossed, walk away from the deal. You will be better off in the long run.

Contract Negotiation

Many businesspeople are not comfortable negotiating a contract, but unless you want to trust that everyone else will operate with your best interests at heart, you need to

negotiate for yourself (or hire someone to do it for you, if you can, like an attorney). The best approach to negotiation is to look for a "win-win" solution, where all parties are satisfied with the outcome and the overall document is fair to all involved.

Unfortunately, some people and some companies, as part of their corporate culture, negotiate for a "win-lose" solution, where they "win" and you "lose." This negotiation strategy is not good for a long-term relationship among the

parties. It can breed a basic dislike and distrust that can backfire.

- Most businesses depend on repeat business from satisfied customers. Customers on the wrong end of a "win-lose" negotiation are usually desperately seeking an alternative and will take their business elsewhere as soon as they are able. Research has shown that they will also let at least ten other people know how

unhappy they are!

- Equally, suppliers or subcontractors on the wrong side of a "win-lose" negotiation will usually do their best to recover or get out of the situation/relationship. This "recovery" or "escape" can end up being much more expensive to the employer/contractor than a more equitable contract would have been.

Research and experience show

that "win-lose" is usually transformed into "lose-lose" experience in the long run. "Win-win" is a better goal, both ethically and practically.

The best contract negotiation is actually just documentation, in proper format written (or at least reviewed) by an attorney representing each party, of the terms and conditions that have already been discussed and agreed to by all parties involved.

Cyberspace Contracts

When you think about traditional contracts (interactions involving an offeror, an offeree, and consideration resulting in an agreement among two or more parties, who know each other, and who promise to perform a transaction with each other), you have many examples in daily life to guide you. In cyberspace, it starts to get more complicated. How often do the parties "know" each other and come to a meeting of the minds?

Lab 7.1 Exercises

7.1.1 Describe the Three Basic Elements of a Contract

You are a Web developer and have a potential new client. After a couple of long discussions with you, the client has asked you for a proposal, delineating what the Web site will contain, how it will be organized, when it will be done, and how much it will cost. You

also include some options for the client to consider monthly maintenance, training, additional sections, and functionality (a shopping cart, an e-mailed newsletter). Each option is priced separately.

You do not have a contract yet, but you elements of a contract do you have?

a)

What element is missing?

b)

If the client likes your proposal but suggests a change, what could have happened? What are your options?

c)

You did not indicate an expiration date or a long-term exposure as a result?

d)

7.1.2 Evaluate a Contract

After reading most of a contract, you, as the developer, sign the contract, collect the agreed 30% deposit, and begin work. You immediately hire two subcontractors: a graphics designer to prepare graphics for the site and a Java programmer to develop a couple of custom applets. Thirty days later (when you are about 60% done with the initial development effort and your subcontractors have completed their efforts), the client submits their notice to cancel the contract in a week. They do not

tell you why they are canceling, and they tell you that they don't need a reason. They reference a clause in the contract that you had not noticed:

"This Agreement may be terminated/cancelled by Client for its convenience on seven days prior written notice to Developer."

Can they cancel this contract?

a) _____

Can they cancel the contract without tel

b)

Assuming that you have already invested
you recover for the investment you made
development?

c)

There are two other clauses in
the contract that you missed
when you reviewed it:

"Work may not be

subcontracted or otherwise performed by third parties on behalf of Developer without the prior written permission of Client."

"Client shall reimburse Developer for reasonable out-of-pocket expenses incurred at the specific request of Client."

If you do not have the client's written approval, what are your chances of being reimbursed?
Why?

d)

Will you read the *next* contract more carefully to find some clauses that you would have negotiated? e) those clauses deal killers?

Lab 7.1 Exercise Answers

7.1.1 Answers

You do not have a contract yet, but the elements of a contract do you have?

a) _____

You have two of the three elements.

Answer: Contracts have three elements: a contract offer, a contract acceptance (or a contract proposal), and you have indicated that you are willing to accept the offer at the appropriate price.

What element is missing?

b) _____

The only missing element is the contract price.

If you wanted to withdraw the proposal (or the contract offer), now would be the time to do so.

Answer: The contract price is missing.

discover the mistake after accepting cooperation of the offeree to allow not required to cooperate.

If the client likes your proposal but happened? What are your options?

c)

The offeree has, by proposing a counteroffer. So the roles are now

You are now the offeree and your counteroffer, you have several options (counteroffer and request a change indicate less functionality), or reject fair) to request a concession from concession.

Answer:

7.1.2 Answers

Can they cancel this contract?

a) _____

Unless there is something else in situations where this clause does can cancel this contract.

Can they cancel the contract with

b) _____

Answer: *Again, unless there is some other this one, they do not owe you any convenience.*

Assuming that you have already i
you recover for the investment y
development?

c)

Answer: *Maybe and maybe not. It depend
progress payments terms).*

If you do not have the client's wri
what are your chances of being re
Why?

d)

*If you are in violation of the first
the client, the chances of recover*

Hopefully, you can pay for their ef
are probably out of luck. Obvious
clause *before you signed the cont*
client's written permission first. It
allowing reimbursement for reaso
first clause is pretty clear.

Will you read the *next* contract m
some clauses that you would hav

e) those clauses deal killers?

You should answer yes, yes, and the need for an attorney to do a

Most developers would find the s
written. You should be able to sof
many cases these draconian claus
terms" included in every draft agr
that they will be eliminated from t
the negotiation process.

They could also be included becau
Many very large companies and t
clauses in their contracts because
conditions over and over. They ar
customers have so many compet
do business on whatever terms tl
what is on the surface a "win-lose
in the long term. You may decide
badly. Or you may conclude, after
are seldom actually implemented
run these contracts past an attorn

Answer:

sign one. At a minimum, the attorney you will be taking and potentially others that mitigate the effect of the motion.

Lab 7.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

Which are two reasons to use a written and signed contract in a Web development project?

1. _____ Attorneys need the

business.

- _____ It should document the requirements, responsibilities, and price of the project.
- 1)**
- _____ If anything goes wrong, it can help clarify the situation.
- _____ It is required by the U.S. federal government and the IRS.
- _____ Written contracts are required by many state and local regulations.

You may withdraw an offer

- 1. _____ After it is made, but before it is accepted.**

- _____ After the contract is signed, but before work has started.

2)

- _____ After it is made and accepted.
- _____ If they have not accepted it within 30 days of their receipt of the proposal.
- _____ Whenever you want to withdraw it.

A client may cancel a contract

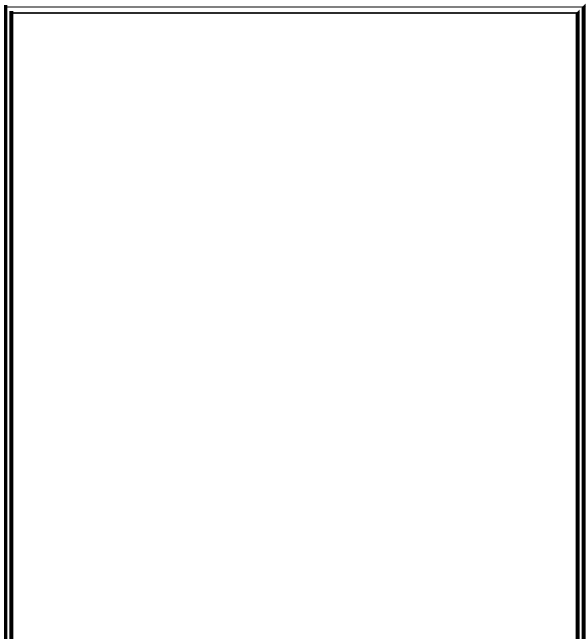
1. _____ Whenever they want to cancel.

- _____ After the proposal is made, but before it is accepted.

- 3)** ● _____ According to whatever is written in the contract about the client's ability to cancel.
- _____ After the contract is signed, but before work has started.
- _____ Whenever they want to cancel, as long as they pay all the expenses.

Quiz answers appear in
[Appendix A, Section 7.1.](#)

Lab 7.2: Developing Web Content



Lab Objectives

After this Lab, you will be able to

- [Define Copyright and Trademarks](#)
- [Describe the Five Basic Sources of Web Content](#)
- [Understand How to Develop a "Safe" Linking Strategy](#)
- [Advertise on the Internet](#)

The Web has the reputation of being like the "Wild West" where normal rules don't

apply:

You can freely use anything from anyone's Web site, and vice versa, without penalty? (Not true.)

Anything you publish on the Web can and will be "borrowed" by someone without your permission. (This is technologically true in most cases, but there are steps you can take to protect your work.)

You can post anything on the Internet about any person or product, true or not, without fear of legal retribution? (Not true.)

Fortunately for the future of creativity and commerce, business rules apply on the Web, enabling creative and ambitious people who develop their ideas on the Web to reap the benefits of their work. Truth is still truth, on-line and off, so concepts like fraud, defamation, and liability transfer to the cyber world

from the real world.

Copyright and Trademarks

Copyright

Copyright is just what it sounds like the right to make copies of (reproduce) a work.

Categories of creativity protected by copyright include computer programs, literary works, movies, graphics and

art, photos, sound recordings, and audiovisual presentations. "An original work fixed in a tangible medium of expression" is automatically accorded copyright protection at the time of creation. We have all created many, many "copyrighted" things, from the time we scribbled with crayons in preschool to today, when we sent an e-mail to someone.

It is the tangible *expression* of an idea that is copyrightable, not the idea, itself. The *ideas* presented by the copyrighted material are *not* protected by

the copyright. Your HTML code or JavaScript is protected by copyright, but the ideas presented by the code are not usually protected, unfortunately. Patents, which are another form of intellectual properties, protect ideas.

The ownership of a copyright may be the source of dispute. Usually, the creator is the owner of the copyright. Frequently, an employer owns the copyright of the results of an employee's work. Employer ownership is not automatic, however. If the employee

performed the creation as a normal part of doing "the job" while working at "the office" using the employer's property, then this is probably classified as "work for hire" or "work product." The employer, who pays for the work that created the copyrighted material, usually owns the results. As usual, discussing this issue prior to initiating work and documenting that agreement in a written, signed contract, with the assistance of an attorney, is usually the safest course. Many times, as a part of the new

employee "orientation" process, new employees sign a contract in which they waive their ownership of anything that they may create during the course of their employment.

It is a *very* good idea to put the world on notice that you own the copyright to your work, although in the United States, it is not a requirement. You notify the world of your copyright ownership by marking your work with the copyright symbol (the c in the circle, like this ©) or the word *copyright*, the year of the

first publication, and the name of the owner. Frequently you will also see the words, "all rights reserved" as well:

"© Your Company, 1999. (*or* Copyright, Your Company, 1999.) All rights reserved."

(Many newer software products will automatically put a circle around the c for you when you type the c within a set of parentheses.)

In specific situations, you can use copyrighted materials. This limited use is called "fair use."

This is a very sensitive area. Typically, fair use is use for reporting, education, and criticism. For these purposes, limited use of excerpts is allowed. A TV movie review show wouldn't be as interesting or as effective without the movie clips we see during the reviews. These clips are not usually used so extensively that we lose desire to see the movie, so there is no economic damage to the movie from the use of the clips. (The review may inflict economic damage, but that is another issue.) Do

not assume that you can freely use copyrighted material under fair use. This is a very complex area, and the damages can be significant. Check out the Web site fairuse.stanford.edu for more information on fair use.

In late 1998, the U.S. Congress passed the Digital Millennium Copyright Act (DMCA) to update copyright laws and regulations. It has some provisions that may affect fair use. The primary focus appears to be offering some protection from copyright infringement liability to the businesses and

individuals in the Internet information distribution chain. Basically, it allows Internet service providers (ISPs) to make copies of digital transmissions in the normal process of performing their transmission services without fear of infringing on the copyrights of the transmissions' contents. In addition, it also appears to release providers of information location tools (search engines) from liability for copyright infringement if use of their "tool" results in a link to a site that infringes on

someone's copyright.

The DMCA does impose a new requirement on the Internet industry. It requires the registration of a designated agent to receive notification when someone has posted something objectionable (or infringing) on an organization's Internet resources. The recipient of this notification is then required to remove the offending material "expeditiously" or "to remove or disable access." This appears to address situations where someone puts infringing

material on a Web site or posts infringing information on an electronic bulletin board or news group. The key here is to identify, and *register*, an individual to receive the complaints. The Register of Copyrights in the Copyright Office receives and retains this information.

Since the DMCA is so new, it is impossible to know what kind of rules, regulations, and case law will develop over time. So keep watching for more information about the DMCA and its impact on cyberspace.

Trademarks

A trademark is different from a copyright. It is best to hire the services of a trademark or intellectual property attorney for federal registration.

Ownership of a copyright vests in the creator at the time of creation. Trademark ownership is *not* automatic. There is a complex application process, and research is required before an approval for trademark ownership is obtained.

You don't automatically receive a trademark just because you have requested it. First you must demonstrate that you are using the mark or have an immediate intent to use the mark. Then there must be a search to see if any other organization is using the same trademark in the same class of goods or services. There cannot be two registered trademarks for "widget" if both of them are in the same class (software, for example). The same trademark name may be used by differing organizations in differing

categories Digital Equipment Corporation registered the word "VAX" as the trademark for a computer. Another company registered the same word as the trademark of its vacuum cleaner. Both were acceptable registered trademarks because most people would not have confused the two.

A thorough search of trademarks is required (and the safest course of action). This is usually best done by an attorney who specializes in trademarks or in intellectual

property (IP). You can do some checking yourself at Web sites like

www.uspto.gov/tmdb/index.htm

The purpose of registering a trademark is to establish exclusive ownership of an identifiable trade name. A trademark may be a symbol, a graphic, a word or phrase, even a sound, and, rarely, a color. Once you have survived the process and been awarded your trademark registration, you must protect your trademark, or it could be lost.

For maximum protection in the United States, a trademark must be registered, either with a state registry or, preferably, with the U.S. Patent and Trademark Office, or both (ask your attorney). Once awarded, a registered trademark is usually viewed as a valuable company asset. Registering a trademark in the United States does *not* automatically give you an international registration, unfortunately.

After your trademark registration has been awarded by the U.S. Patent and

Trademark Office, you are entitled (and very strongly encouraged) to mark your registered trademark with the R in the circle ® beside it. Only trademarks that have survived the registration process with the U.S. Patent and Trademark Office are entitled to use the ® , which indicates a registered trademark. If your trademark is not registered with the U.S. Patent and Trademark Office, do not use the ® mark beside it. You can use the TM while you are in the

registration process even if you are not planning on registering immediately. But you must make sure that you are not interfering with someone else's mark.

If you have permission from a trademark owner to use their trademark on your Web site, ask them how they want it presented and then be sure to respect their requirements. For example, your company may have a business partner whose products you sell, and, assuming that those product names have registered

trademarks, you will probably want to use those trademarks on your Web site, and your business partner will probably want you to use them. Many company logos are trademarks, and they are always a specific size or a specific height to width ratio, specific colors, specific fonts, etc. They may also be given to you as a graphic file.

Your business partner may require everyone who uses their logo to place the logo in the upper left side of each page (or lower right, or whatever).

Whether the trademark is a graphic or a word, there is usually a required credit line at the bottom of the page giving the specific text used to reference the trademark. For example, "This is the registered trademark of the XXX Corporation." If you don't follow the guidelines for the use of your partner's trademark, you may be viewed as infringing on it. It's better not to use their trademarks at all rather than use them inappropriately or outside of the guidelines.

For more information about trademarks in general, go to www.uspto.gov/web/menu/tm.h

Trademarks and Meta Tags

In the endless games that Web developers and search engines play with each other, meta tags are an important component. Some developers and/or Web site owners have added a new wrinkle to this game that *seems* like smart search engine

gamesmanship. They add the names of their competitors' products and services to the list of key words in the key word meta tag. For example, if your company's competitor had an extremely popular product named "Smith's Extra Fast Printer," your company would probably want to divert sales for that product to one of its own, "Jones' Equally Fast Printer." In this case, it *might* seem like a good idea to add the phrase "Smith's Extra Fast Printer" to the list of key words in the key word meta tag. But

particularly if "Smith's Extra Fast Printer" was a registered trademark of Smith's company, your company could be making a very expensive mistake.

Do not make the mistake of assuming that the Smith company will never find out about this particular game. Companies are bombarded by services promising to move them "up" in the search engine results, so people are paying attention to what is happening with the search engines and their products or services. The Smith company will probably

discover your company's games and not be happy with what is happening. They could easily take the view that you are infringing on their trademark, and they would appear to have a very good case. Your company could be quite expensively embarrassed.

Five Basic Sources of Web Content

As we have noted in earlier chapters, successful Web communications models are, in

many cases, duplicates of successful physical models, like a comprehensive book or music catalog. In another parallel with the physical world, successful Web sites, from a legal point of view, are also built on the model of a business that is compliant with the applicable laws and regulations. To act otherwise is to put yourself and your organization at risk.

Once you have developed your plans and mapped out your audience interactions, you will start developing your Web

site's contents. For the purposes of this chapter, we will define *Web content* as the text, graphics, and design of each page. Ownership of that content is extremely important, and this is when Web developers and Web site owners must exercise caution and good judgment. Using someone else's content without their written permission is as bad a decision on the Web as it is in the rest of the business world. To the best of your abilities, refrain from using material on your Web site for

which you do not have the permission of the creator or owner. To do otherwise is to invite embarrassment and loss of reputation as well as to put significant amounts of money (and, maybe, your job!) at risk.

There are numerous sources of content, but, from an ownership point of view, it all boils down to five basic sources, and each has its own issues:

- 1. Original content developed by you or your organization's**

employees

- Original content developed by an individual or organization *outside* of your organization at your direction (e.g., a Web developer or a graphics designer who works independently or for another organization).
- Previously purchased content being repurposed for the Web site.
- Borrowed content used without the need to pay the

person who created it or the person or organization that legally "owns" it. This content may legally be used for free.

- Borrowed content used with the specific permission of the owner to include it on the Web site in exchange for the payment of a fee or the purchase of a license to use the content.

The following is a detailed discussion of these five situations:

1. Original content may be

created specifically for the Web site by company employees, or existing company-owned materials (e.g., the contents of the organization's personnel manual) may be modified for Web use. (For a discussion of repurposed material, see item 3.)

If you are an employee of the organization, doing your job, the organization that pays your salary usually owns

the output of your work. This situation is classified, in legal terms, as "work for hire" or "work product." You do not own the output of your work. Your employer does, and they have the right to use it. So anything that you create for your employer in the normal course of doing your job, your employer has the right to put on the Web site without your expressed permission.

- Original content developed for the Web site by individuals or groups outside of the Web site owner's organization may be used on the Web site, in accordance with the terms and conditions of the agreement between the Web site owner and the outside organization.

This content is also usually new, at least for this organization or Web site, and it may or may not have been developed specifically for this Web site. The Web site's owner usually pays to purchase or

license this content, either with money or with some other form of compensation.

This is also usually classified as "work for hire" or "work product," and ownership of the results of the work (the contents developed, in this case) resides in the organization that paid for its creation, not in the individuals who created it. In some cases, the originating organization continues to "own" the content, and the Web site's owner pays for a license to use it for a specified period of time.

At the beginning of the Web site development process, both parties should sign a contract specifying the terms and conditions of the relationship between the two organizations. These terms and conditions should include when ownership of the content (copyright) transfers from the creator organization to the Web site owner organization, the price to be paid, deadlines for creation and payment, and who is responsible for what.

- Repurposed content created

for another purpose but used on the Web site. If existing company materials (e.g., the contents of the organization's personnel manual) are being modified for use on the Web site, check into the background of that material if possible to see who owns what and for what specific use and time frame.

Your organization's staff probably created much of the material being repurposed at some point in the past. On the other hand, people or organizations from outside your

organization may have also created some of it (e.g., the photography or some of the graphics). Before using material created by someone from outside of your organization, you need to check with the terms and conditions of purchase, or of the license to use, to see if using the material on the Web site is in compliance with those terms. In many cases, the materials were developed before the Web was even a glimmer on the horizon, and the terms of the agreement do

not include permission to use the material on a Web site. Check with an attorney to see how you should proceed in this situation.

If the terms and conditions prohibit use of the material for anything other than the original purpose or certain other restrictions on use (maybe time frame, distribution method, or quantity produced), you will need to make a change. You should go back to the originator and get the permission that you need, through a new agreement or a

modification of the existing one so that you are in compliance with it. Or, you need to find or develop a substitute if agreement cannot be reached.

Unless you know to the contrary, assume that you will be violating an old or existing contract by posting material on the Web site. Using the personnel manual as an example, there are companies and consultants who create personnel manuals for organizations as a product with a price tag and associated terms and conditions. Over the

past few years, publishing the contents of an organization's personnel manual on the Web has become much more common (on an intranet, for example), so existing contracts may address the issue, like allowing the publication on an intranet but not a public Web site. If your personnel manual, or other content, was originally created several years ago, you would be very wise to check into the contract that was the basis of that work. In many cases you will find that distribution and copying are

limited to the traditional forms.
Check before you proceed.

- Borrowed content that may be used without permission or payment is content in the public domain, like Shakespeare's works, many government documents, and other works whose author or creator has been dead for more than 70 years. You need to be very careful with this category as well. It is not as simple as it looks. You can do some research into what is the public domain at

lcweb.loc.gov/copyright/cir/cs/cir

You might think that a very popular and ubiquitous cartoon mouse is in the public domain, but that character is also a famous company's trademark. Use that mouse or any other organization's trademark at your peril. Better yet, do not even think about using any trademark but your own on your Web site unless you have obtained written permission. It is best to use an attorney experienced in the field to research trademark ownership.

On the other hand, very rarely an owner or creator may grant a blanket permission to use their work without any compensation for its use. For example, there are some Web sites that offer "free" graphics for use on Web sites. You need to be cautious here, too, however, because usually that permission has a caveat that limits use without payment to noncommercial use only, and payment is required before commercial use. Typically, noncommercial use means use on personal Web sites, not the

Web site of a for-profit or a nonprofit organization. Read the terms on the Web site to see how noncommercial use is defined to see if it applies to your proposed use. If noncommercial use is specified as approved but there is no definition of noncommercial use, *ask!* Even charities and other nonprofit organizations need to pay for some things. So don't assume that your church's or your PTA's Web site can freely use other people's works without permission *and* compensation.

- Borrowed content may be used with the specific, usually compensated, permission of the owner/creator organization. This kind of content may be the trademark of a business partner, like the trademarked name of a product (which is usually provided for free if credited appropriately). It may be a quote or section from a book or article and must be used with permission and specific credit to the original source. There are organizations (with Web sites) where you can research the need for

permission, the terms, and the associated costs. Check out www.copyright.com and www.icopyright.com for more information.

Developing a Safe Linking Strategy

Pointing to Web sites outside your organization's Web site is something to approach cautiously. Along with the obvious concerns about losing visitors and keeping outside links live, you should also be

concerned about what the visitors might find at the linked site. Don't forget that, depending on how you approach this issue, the site that you are linking to may not be thrilled with your generosity.

Do not assume that your external linking strategy is your little secret. It's not. For some time, search engines like AltaVista (www.altavista.com) and HotBot (www.hotbot.com) have had the capability of doing a "reverse" search. This means that you can put a URL

into the search field and have the search engine search for sites linking *to* that URL. (It's a little more complicated than that, but not much!) There are also Web-based services that "sweep" the Internet for Web site owners, gathering the URLs of Web sites that link *to* a specific URL. So the Web site owner *will* find out eventually.

Unpleasant Surprises

You may be providing links to

other sites as a service to your visitors. If you do, it's usually a good idea to offer a fairly prominent disclaimer indicating that you are providing a service and have no control over what someone else puts on their Web site. Always offer visitors the opportunity to provide you with feedback, so that they can let you know if something is not appropriate or offends them. It is also a good idea to methodically and periodically review the content at the end of those links, just in case a new ownership has a new

philosophy that differs from yours or from the original owner's.

Unhappy Linkees

Most of the time, Web sites are thrilled, or at least pleased, to have "inbound" links (other Web sites that point visitors to their Web site). However, you can change that attitude very easily by the way that you provide those links. You will have unhappy "linkees" (sites to which you link from your

Web site) if you

Link to their site solely for the purpose of "borrowing" a graphic

Disguise the identity of the site you are linking to (as in a frame) so that you get the credit and the revenue while someone else does the content development

Offer your visitors a link into a "members only" area to which the linkee is

otherwise trying to limit access

Imply that there is more of a relationship between your two organizations than there actually is

For example, occasionally someone will find a graphic that they particularly admire and want to use on their site. They do not want to be accused of "stealing" it, so they just pull it into their site via a link from its home site. They use the tag, pointing to the URL

where the "live" image appears. This kind of action has created consternation. Most notably, a cartoonist had a fan link to a selection of the cartoonist's strips from the cartoonist's Web site. The link pulled those strips into the fan's Web site. Some might see this as flattering. However, copyright and trademark holders probably would not appreciate it. The cartoonist and his publisher felt that this link infringed on the cartoonist's copyright and also on the cartoonist's trademarked

characters. Unprotected trademarks may be at risk of losing their trademark status, which would have put a big dent in the cartoonist's bank account. So you can imagine why the cartoonist was not pleased. He took action against his fan to protect both his copyright and his trademarks.

In another famous situation, a Web site focused on collecting the latest news from the best sources linked to many of the major news Web sites (CNN, etc.). These major news sites were not pleased with those

inbound links because although their news pages were shown to a group of visitors, those visitors could not see which Web sites were actually the sources of the news. The news collection site was using frames, and frames technology displays only the parent URL in the browser location field. So the only URL displayed was the URL of the news collection site, not the news services sites that were the actual sources of the content. Thus, the framing Web site was generating revenue from the work of the true news

services through the advertisers on his own site while hiding the URL of the news services. This practice was challenged as infringing on the copyright of the news services' Web sites, and the framer was forced to change his site.

Copyright and trademark owners are rightfully concerned about protecting against infringement on their property.

Happy Linkees

At this time, it does not appear to be illegal to link to another site without asking permission first. (It may be bad "netiquette," but not, apparently, illegal.) To keep the recipients of your outbound links happy, respect their ownership of their own intellectual property (trademarks, copyright, etc.):

Use a basic link with the name of the company or organization spelled out and underlined, as usual.

Only use their trademark as a clickable icon (link) if you have their written permission to display their trademark on your Web site.

Do not put their content inside a frame. Many public service Web sites will offer you blanket permission to link to them as long as you don't do it using frames.

Politely ask permission to link to the linkee (a quaint

practice, perhaps, but a nice one, as long as you are willing to accept a negative answer and act appropriately).

Bad netiquette will probably ultimately lead to bad economics, so "play together nicely," as your first-grade teacher taught you a long time ago.

Advertising on the Internet

Many courts and governmental authorities are taking the view that the entire Web site is an advertisement, so the laws governing advertising, as well as the rules and regulations, are being applied to Web sites, too.

Truth in advertising applies to the Web as well as to the rest of the marketing communications world. Just as an unfair or deceptive commercial or print advertisement will get the advertiser into trouble in the real world, so will the same

false claim get the advertiser into trouble on the Internet. The U.S. Federal Trade Commission (FTC) has documented its position that "Web site designers . . . also may be liable for making or disseminating deceptive representations."

Both inside and outside the United States, consumers are, in general, a protected group. In the United States, the Federal Trade Commission Act established the FTC, with broad responsibilities for business regulation. There are also

many other different federal government agencies inside the United States protecting the consumers of different industries (e.g., the Food and Drug Administration focuses on food and drugs, the Securities and Exchange Commission focuses on the securities industry). Different laws affect various aspects of the purchasing process (e.g., Truth in Lending Act, Fair Credit Reporting Act). To the extent that a Web site participates in lending and credit reporting or sells food or securities, those

same rules and regulations would probably also be applied to the Web site.

In the United States, state and local governments are also involved. The 50 states have state consumer protection laws, with rules and regulations enforced by the 50 state attorneys general. In addition, since the Web is worldwide, there are laws, rules, and regulations from outside the United States that may also be applied.

For some guidance, the FTC's

Web site offers an amazing range of information and guidance. Check out the site at www.ftc.gov and also at www.ftc.gov/bcp/guides/guides.l In addition, the FDA also provides guidance on its rules and regulations at www.fda.gov/opacom/morechoic

This lab will attempt to address only those regulations and requirements that seem to cross the most industries. Be sure to research what applies to your industry and geography, and get professional advice from an attorney

familiar with that particular area.

The bottom line is that, assuming that your organization complies with all relevant local and federal advertising regulations in its other advertising, then those same rules and the people with that knowledge should be participating in the development of Web site content. The "wild card" in this is the international aspect that applies to the World Wide Web. If you have a question, or even a doubt, contact an attorney

with relevant experience, and get professional advice.

Truth in Advertising Applies on the Web

The U.S. Federal Trade Commission Act specifies the rules that apply to advertising at the national level. An advertiser cannot lie in an advertisement. Advertisers must back up the claims in their ads with some substantiation, and an

advertisement cannot be unfair or deceptive.

Unfair or Deceptive Advertising

To be compliant, advertising must be truthful and should not present the truth in a way that is misleading. An omission is viewed in much the same light as a misrepresentation. This means that omitting information relevant to the claim is not a good thing to do.

For example, selling a "Swiss" watch that was not manufactured in Switzerland is deceptive. Omitting the information that the watch was manufactured in Thailand, *not* Switzerland, is, effectively, being untruthful, even if you actually bought the watch in Switzerland. The country of manufacture is relevant information for a consumer who wants to purchase a "Swiss" watch.

What is unfair or deceptive as defined by the FTC?

An unfair ad is likely to cause an injury to a consumer that is substantial, not outweighed by other benefits, and not reasonably avoidable by the consumer.

An ad is deceptive if it contains a statement that is likely to mislead a consumer by providing seemingly relevant and important information that should not be accepted at face value. It can also be

deceptive by omitting to include relevant and important information.

If you have a disclaimer to make, do not hide it, and do not expect that, by itself, a disclaimer will protect you.

Substantiated and Unsubstantiated Claims in Advertising

When it comes to claims relating to product/service

performance, health benefits, and safety benefits, the FTC usually requires substantiation. The level of substantiation typically depends on the product/service and the nature of the claim. If an on-line advertisement claims that an automobile can go from 0 to 60 mph in 6.0 seconds, then it should have the test results that show that the automobile performs at that level. If the test automobile was modified to make it faster, then the claim may not be substantiated *unless* the ad clearly states that

the car that reached that speed had been modified and is not the standard car being sold off the assembly line. That information should probably be included in a prominent disclaimer closely associated with the claim. As such, it would probably not be a claim worth making.

If the claim states that four out of five dentists recommend a product, then there should be substantiation that a survey, or some study, showed that specific result. A study involving five dentists who

work for the product's manufacturer probably would not be good substantiation. Again, a disclaimer would probably be appropriate.

The FTC recommends that Web designers not depend on their client's (or, if working as an employee, their manager's) assurances that a claim is substantiated, but that they push back to see the substantiation for themselves. If they do not feel that the substantiation is sufficient, they should avoid making the claim.

If you are performing the function of the Web designer or the Web marketer, you should press to see proof that the claims being made are substantiated. Remember, the FTC currently believes that it may hold you responsible.

Advertising Aimed at Children

This is an area of particular attention and sensitivity because children, in general,

are less sophisticated and skilled than adults in evaluating the information (or lack of information) being provided to them. Guidance on proper advertising to children is available from the Children's Advertising Revue Unit (CARU) of the Council of Better Business Bureaus at www.bbb.org/advertising/carugl

Free Product or Service Advertised

Offering something free is very powerful. However, advertising that you are giving away something for free is not as simple as it sounds. You must take great care not to deceive or to act unfairly toward consumers. In your ad, you must clearly specify the applicable terms and conditions. In addition, the product or service offered for free should be one that is typically sold at a standard price. So the "Buy One Get One Free" statement should offer one item at no price when

the same item, bought at the standard price (in effect during the 30 days prior to the offer), is purchased. See www.ftc.gov/bcp/guides/free.htm for the details.

Financial Transactions

If you accept orders on your Web site, you should be paying attention to the rules and regulations that affect the world of financial transactions.

For example, the Fair Credit Billing Act requires that you respond in writing to customer complaints, credit payments within a specified period of time, etc. For more details, see www.law.cornell.edu/uscode/15/

If you accept orders for items to be shipped, then you are probably covered by the requirements of the FTC's Mail or Telephone Order Merchandise Rule. This requires that you either post an expected shipment time frame or, if you do not state a specific time frame, then you

"reasonably" believe that you will be able to ship within 30 days. Should you need to postpone shipment for some reason and be unable to ship within the specified window, then there are consumer notification requirements, which may require that you receive permission from the consumer to delay shipment or offer the consumer the opportunity to cancel order. Again, more details are available on the Web at www.ftc.gov.

Testimonials and Endorsements

In general, you cannot substitute testimonials and endorsements as claim substantiation. If you post any testimonials or endorsements, they should be those of your "typical" customer not the endorsement of the only satisfied customer that you have. Experts should have relied on their standard tests or other procedures. Or, if they are paid by your organization

or otherwise connected (e.g., stockholder), that connection should be clearly disclosed. See www.ftc.gov/bcp/guides/endorse for more information.

Lab 7.2 Exercises

7.2.1 Copyright and Trademarks

A copyright occurs when the creator

a) _____

When you hire a consultant to write a book as part of your company's promotion effort, in order to ensure that you own the copyright to the book, you should:

b)

A trademark registered in the United States is:

c)

Before you initiate the process to register a trademark, you should do the following things:

d)

Two organizations can own the same tra

e)

7.2.2 The Five Basic Sources of Web Content

The five basic sources of Web content are

a)

You are a Web developer working as a company employee on the company's new Web site. Content is being pulled from several areas of the company and people are busily working on it. You have been requested to repurpose a large brochure for one of your company's main product lines.

Assuming that this addition and the reputation Web site development strategy and plan collect before you start?

b)

If you discover that the graphics used will be your next step?

c)

Who owns the rights to the new material: the employee, or your employer?

d)

Additional content must be developed since the brochure is now out of date. No one from the company's marketing communications department is available right now, and you must proceed ASAP. So a decision to outsource has been made, and you have chosen a qualified writer from outside the company.

How do you ensure that your employer writer's materials on the new Web site?

e) _____

The determination has been made to develop the new Web site from a Microsoft-centric point of view, so you need to add the Internet Explorer logo and the "Best viewed with Microsoft's Internet Explorer" statement on each page. You can easily get the Internet Explorer logo, but you see that it is also a Microsoft trademark.

Do you need permission to use the Internet Explorer logo? If you don't, why not?

f)

7.2.3 Safe Outbound Linking Strategies

Why should you be cautious about linkin

a)

Most site owners will object to being pulled.
Why?

b)

Is using a company's trademark as the content
or why not?

c)

7.2.4 Advertising on the Internet

Why should Web designers and developers be concerned about advertising on the Web?

a)

If you can keep the Federal Trade Commission from passing legislation that would require governmental groups should concern you?

b)

Would your board of directors be a sufficient number of customers that you could use their testimony to substantiate the effectiveness of your advertising?
men lose weight?

c)

What kind of advertising claims should you
be able to substantiate?

d)

If the "home library" is comprised of copyrighted
text, should you include a disclaimer about
them for sale on the Web?

e)

Lab 7.2 Exercise Answers

7.2.1 Answers

A copyright occurs when the crea

a) _____

*A copyright occurs when the crea
her idea. And it is only that tangibl
of artwork, etc.) that is copyright*

Answer:

When you hire a consultant to wr
part of your company's promotio
order to ensure that you own the

b) _____

If you want to freely distribute the software, you should preferably, or possibly have a license that allows you to do it freely.

Answer: *If you paid the consultant to write the software, you should have a contract with the writer before work begins that specifies that copyright ownership will remain with you upon completion of the contract, presumably.*

A trademark registered in the United States

c) _____

To register a trademark in the United States, you should

Answer: *file an application with the U.S. Patent and Trademark Office.*

approved before it is officially reg

Before you initiate the process to things:

d) _____

You should probably do many things following three.

Hire an attorney who specializes in

Answer: Be using the proposed trademark
immediate intent to use the trade

Have a professional research you
is using it. Your attorney or some
the best person for this effort.

Two organizations can own the same

e)

Two organizations can own the same classes of goods or services, and reduce the perceived value of either.

Answer:

7.2.2 Answers

The five basic sources of Web content are:

a)

New original content created by someone outside the company. Repurposed content used without the need for permission. Content used with the need for permission.

- New original content developed by someone outside the company would most likely be owned by the company, not the individual, product, with no need for explanation on the Web.
- New original content developed by someone outside of the company, but the content, presumably with the permission of the company, is posted on the company Web site.
- Repurposed company-owned content created entirely by company employees and posted on the company Web. However, if someone c

Answer:

the company, the copyright
If the material is pre-Web (1
purchased with an expressly
it may not have been expres
necessary.

- Borrowed content used with
This material is commonly k
frequently it is hard to figure
the public domain. So do mc
attorney to do!), and proce
the material is "public domai
- Borrowed content used with
(usually). This content is typ
want to use on the Web site
partners (who do not usuall
logos) and excerpts from m
probably will require both wr
for that use).

Assuming that this addition and the Web site development strategy are to be collected before you start?

b)

There is a great deal of information

Within that collection, the information developed the content, when it was under what specific terms and conditions contracts kept with the other major organizations have differing filing systems so this may not be an easy task. record and copies of all contracts, attorney (if known) may still have

If you discover that the graphics are is your next step?

c)

*You need to find out what rights t
contract.*

Answer:

This will tell you whether or not yo
site, if you need them. You need t

Who owns the rights to the new i
the employee, or your employer?

d)

*In this case, the answer is usually
material that you create while do*

Answer:

In some cases, people are workin
special arrangement that allows t
Check with an attorney before at

previous job.

How do you ensure that your em
writer's materials on the new Wel

e)

*Discuss the situation with the writ
value to your employer unless the
use the materials on the Web site
writer, work with an attorney to c
agreement should be signed befo
payment is made.*

Answer:

Do you need permission to use the software if you don't, why not?

f) _____

At this point, you do not need Microsoft's permission to use the Web site because Microsoft wants the world to know that you have a legal right to use the software.

Answer:

If you go to the Microsoft site, you will find the following link:
msdn.microsoft.com/downloads/

7.2.3 Answers

Why should you be cautious about

a)

There are many reasons.

Two of them are self-defense first, acceptable and appropriate when unacceptable and inappropriate or change over time. Second, because Web sites, you may find that your file has moved, or been renamed, concerns include a negative reaction happy with the context of the link link is selected.

Most site owners will object to be Why?

b)

They will object because their URL site by the way frames work.

Answer:

This may impact their ability to gain on their copyright and/or trademark.

Is using a company's trademark a good or why not?

c)

It is a good practice if you do not to use their trademark on your Web to keep them as consistent as possible.

Answer:

On the other hand, usability studies text (an "old-fashioned" link) is less graphic.

7.2.4 Answers

Why should Web designers and developers advertise on the Web?

a)

Web designers and developers need to be in a stated position that they view the Web as a tool for making or disseminating deceptive

Answer: *Web designers and developers need to be in a stated position that they view the Web as a tool for making or disseminating deceptive*

If you can keep the Federal Trade
governmental groups should conc

b)

*It depends on your products or se
customers are.*

If you sell a food or drug, you also
securities, you need to worry abo
(SEC). Because a Web site may b
one large advertisement, you nee
local governments' rules and regu
Internet and their federal and loca

Answer:

Would your board of directors be

customers that you could use the effectiveness as substantiation for
c) men lose weight?

Answer:

Your board of directors has a vested interest in the product's success, so they would not be paid for testimonials are specifically excluded from advertising claims.

What kind of advertising claims should be substantiated?

d)

Answer: *Claims related to health and safety*

If the "home library" is comprised text, should you include a disclaimer them for sale on the Web?

e)

Answer: *If you don't include a disclaimer c considered to be using deception*

Lab 7.2 Self-Review Questions

In order to test your progress, you should be able to answer

the following questions:

It is illegal to link to another Web site without the permission of that site.

1) 1. _____ **True**

- _____ **False**

An employee, in the normal course of doing his or her job, creates a document. Who owns the copyright to that document?

1. _____ **Work created by employees cannot be copyrighted, so no one owns it.**

- _____ **The employee always owns the copyright for his or her creation.**

- 2)** ● _____ The employer always owns the copyright for the employee's creation.
- _____ The employee's attorney probably owns the copyright for the employee's creation.
- _____ The employer probably owns the copyright unless the employee has a contract with the employer that specifies otherwise.

If you own a trademark, you must protect it to keep it valid.

3) 1. _____ **True**

- _____ False

No permission is needed to use the Coca Cola trademark to add color to **4)** your company's Web site.

1. _____ True

● _____ False

It is acceptable to borrow content off the Web for your Web site, for two of the following reasons:

1. _____ You have permission to use the content, in writing, from the copyright owner.

● _____ You know that exactly the same content has been used by other Web sites.

5) ● _____ You have researched the content's source and know that the

content is in the public domain.

- _____ You believe that your use fits under the description of fair use because you are using the Web site to learn as much about Web site creation as you can.
- _____ The content was not marked with the © Copyright notice.

You cannot use someone's trademark on the visible part of your Web site, but using a competitor's name or the words comprising their trademark is 6) appropriate for key word Meta tags.

1. _____ True

- _____ False

Quiz answers appear in
[Appendix A, Section 7.2](#).

Chapter 7: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

In this chapter's Test Your Thinking project, assume that

you have completed the development of your own Web site. Go to 3 search engines to see when and where your site shows up. This also gives you a chance to do some competitive analysis and to see if anyone is infringing on your copyright or trademarks. In addition, check the "Legal Notices" section of the [Amazon.com](https://www.amazon.com) Web site for examples.

- How does your contract define the
- 1)** completion of the Web site? When do you know you are done?

- Develop a legal statement for your
- 2)** Web site covering the copyright issues to put on each page of your Web site.

- Are there any other legal issues that should be covered for your Web site
- 3)** (check the [Amazon.com](https://www.amazon.com) Web site's example to see the kinds of things that might need to be covered)?

- Do a search engine search on your Web site (or another one) and evaluate the results. How can you use those
- 4)** results to see if a competitor is infringing on a copyrighted or trademarked property?

Chapter 8. Project Life Cycle Basics



"The road is not always to the swift . . . but to those who keep on running."

Anonymous

Chapter Objectives

In this chapter, you will learn about

✓ Goals of Successful Project Management

✓ Comparing Project Management in Various Industries

✓ Project Tasks

✓ Project Life Cycle Formats

So you've gone to school for Web design. Or maybe you're looking to expand your advertising business to include an interactive division. You've

heard all of the acronyms ASP, HTML, and VB. You know that if a potential client says that he wants Java, he's not talking about a cup of coffee. You may know how to program in ten different Web languages, make eye-popping graphics, and build the Web server. However, undertaking the responsibility of someone else's company image and understanding their needs is a whole different arena. Doing so in a way that you don't end up losing your shirt could be considered an art.

Being a super Web developer does not immediately give insight into doing business as a Web developer. There's so much to learn the hard way. In this part of the book, you will investigate how to avoid some of these hard knocks, helping your firm to create a better product and build an excellent reputation. Hopefully, this will allow you to sleep better at night!

First, let me introduce myself. I'm Kim, and I own a Web firm in North Andover, Massachusetts. We probably

have a lot in common because one day, after trying a course in Web site design, I decided that I liked it so much that I wanted to design Web sites for hire. Little did I know that learning the technology would be second to understanding how to address the client fairly, communicate the message successfully, and hire effective people to assist with production. My business grew organically, as many people picture their freelance business might do. No influx of venture capital for me. So when I was

learning how to manage projects for the Web, my mistakes directly affected my wallet and my ability to grow my business. It didn't take long before I realized that a systematic approach to running Web projects was the only way to stay in the business. Every time since that I have been a little bit casual about this point, it costs the firm money.

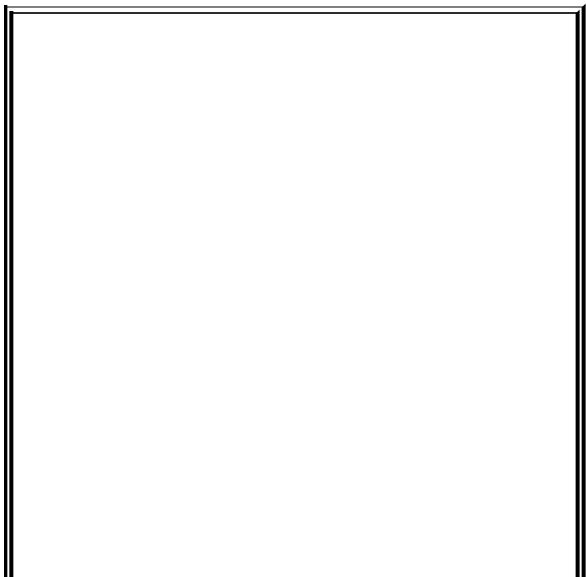
In Part II of *Exploring Web Marketing and Project Management*, it is my pleasure to share my ideas about the successful management of Web

site production. If you're thinking about starting a Web firm, are presently a Web design firm owner, wish to increase job stability because you manage Web projects for someone else, or are just curious about the business side of Web site development, I hope these concepts are helpful. The development process is always changing. It's a dynamic and exciting environment and a chance for people with an entrepreneurial spirit to try out new ideas. There are a lot of negative

experiences that await a Web developer, but there are so many more to broaden the Web developer's personal and professional horizons.

In this chapter, we'll talk about the generalized concepts behind project management and how these concepts can be applied to the Web environment. Let's get started toward running more satisfying Web projects.

Lab 8.1: Goals of Successful Project Management



Lab Objectives

After this lab, you will be able to

- [Identify Client Goals](#)
- [Identify Contractor Goals](#)

Project management assures that Web projects stay profitable. One can bring the best graphic artists, savvy programmers, and/or cutting-edge marketing people to a project, but if communication isn't adequate between all of the constituencies, money can

be lost on a perfectly good opportunity.

Team Dynamics for Web Project Management Include the Following:

- Client management
- Budgeting and scheduling
- Logical work flow

All of these factors contribute to a successful project life

cycle.

In a perfect world, project managers can avoid pitfalls by adhering to a disciplined development process.

Unfortunately, communication, technology, and people are not always perfect. On the client side, upper management is often multitasking profit-centered activities while gathering materials for the company's Web site, but if communication isn't adequate between all of the constituencies, money can be lost on a perfectly good

opportunity. The Web firm itself can become overburdened with too many projects going live at the same time. Despite these obstacles, the project manager must keep everyone centered and on track. Therefore, the process used becomes even more important.

It is a long way from project proposal to implementation. The project is not successful unless all constituencies have been satisfied. Is the client looking for a way to communicate to a new audience or better facilitate

communication with an existing customer base? The Web firm needs to know this among many other things. After all, vague requirements from the client will spell death for the Web project. Throughout this part of the book, we will be discussing techniques to pin down the client requirements so the firm has a chance of meeting expectations.

Clients can be driven by deadlines, increased profitability, market conditions, and/or customer expectations. All are relying on the Web firm

to take their business to the Web in the most effective way. Unfortunately, the client's goals are not always apparent. Some clients are better at communicating their objectives than others. The burden falls upon the Web firm to help clients clarify their requirements. We will investigate how to do this in all areas of Web site production. However, first you may need to understand the process involved with building a site.

On the contractor side, the project team desires to produce

a Web site that meets the client's expectations and generates capital for the firm. These are the goals that can drive the Web firm. After all, if the client's needs are not met, the firm will suffer financial and emotional losses. The client may never see how depressed a project team can become when it has not hit the mark. However, the project manager will. In order to attract and keep good staff, the firm needs to maintain a successful track record. Surely, there will be some disappointing

engagements along the way, but the majority of the projects a Web firm attracts must have a positive outcome.

Along the way, there can be a host of other objectives that need to be met. However, the right questions need to be asked. A project manager must try to put himself or herself in the client's place, understanding the client's point of view and making suggestions. You will investigate the best techniques for handling this challenge as you complete the upcoming

exercises.

Lab 8.1 Exercises

8.1.1 Identify Client Goals

If you were contracting a Web firm to build a business idea, what would your general measure success? Do not worry if you have not done this before. This exercise is meant to spur brainstorming. This is the same mind-set that your client

a)

The local bookstore has contracted you
bookstore with a limited budget reasonable
site?

b)

Interview a small business owner about
business on the Web. Based on your experience
goals seem reasonable? What suggestions

c)

8.1.2 Identify Contractor Goals

If you were to contract on the site ment
your goals/concerns be?

a)

How would you plan to facilitate these g

b)

Lab 8.1 Exercise Answers

8.1.1 Answers

If you were contracting a Web firm for a business idea, what would your goals be? How would you measure success? Do not worry if you have not thought about this before. This exercise is meant to help you think about this. This is the same mind-set that you would use if you were

a)

Different types of Web sites can be used for a variety of purposes (e.g., an e-commerce site that enables direct sales, an informational site that provides information about a firm). I would want to contract a Web firm that specializes in sites for my business.

Answer: *I would also want to see a writer who would want to clarify the approval process so that I don't get stuck paying for a*

I would measure success by realizing the amount I paid for my Web site.

The local bookstore has contracted a Web site developer to build a Web site for the bookstore with a limited budget and no time to spare. How would you build the Web site?

b)

Any Web site that is built to generate sales is a success. Most small businesses do not have the budget of amazon.com. However, this does not mean that a small business cannot build a profitable Web site and add to its success.

I would ask the bookstore for a list of the Web sites currently in use for the store. I would then compare the features of the current Web site with the features of the new Web site. I would then recommend the new Web site to the bookstore.

site could be internally generated catalogs, business cards, yellow p forth. If there are enough cross-r

Answer: that traffic can be generated with advertising on Yahoo (which is to

Based on this foundation, I would features into its Web site as profit want to grow traffic by putting re advertising banner advertising o services.

Depending on the amount of mon time involved with building the W

Interview a small business owner business on the Web. Based on yo goals seem reasonable? What sug

c)

Obviously, this question has many answers. I always beware of the client who doesn't have a very important that anyone who is not a professional understanding of what a Web site

The Web attracts entrepreneurs and leads to unrealistic business plans. I've seen a project without regard for its eventual success. I realize a few weeks down the road it's an unprofitable venture and the developer has no respect for the developer. This is a bad reputation. It's better to turn down the project than to have a bad reputation.

8.1.2 Answers

If you were to contract on the site
your goals/concerns be?

a)

My concerns/goals would be the following:

- 1. I would want to be compensated within my firm to complete the work that was required, I would only have had worked closely in the past.***

Answer: ● *I would not want to lose money on the site.*

- *I would want to produce a Web page that is easy to use and encourages the client to become a regular customer.*

- *I would like to make money for*
- *I would like to see my team's*

How would you plan to facilitate t

b)

I would facilitate these goals by c

**1. Assessing the customer r
and potential subcontract
to complete the project**

- *Making sure that the lines of c*

Answer:

and the project team

- *Underpromising and overdelivering*
- *Implementing budgeting and scheduling*
- *Establishing an atmosphere of trust*

Lab 8.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

Which of the following would be a goal

of the client?

- 1. _____ Getting the project completed for the least amount of money**

- 1)** ● _____ Making the Web site launch date
- _____ Determining a schedule of payment
- _____ Incorporating existing company branding (i.e., logos)

Which of the following would be a goal of the contractor?

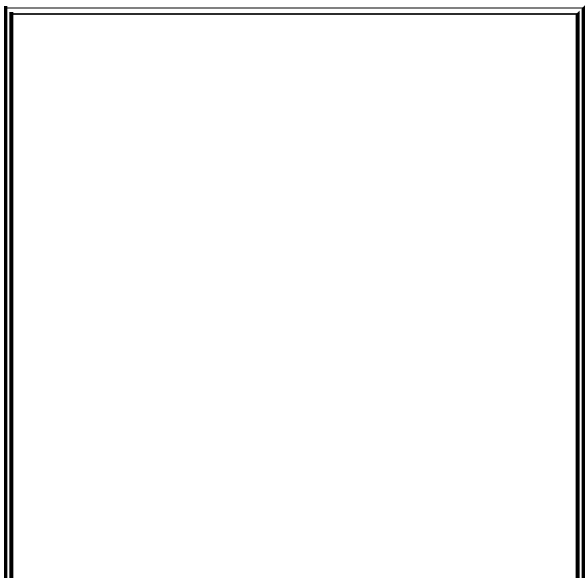
- 1. _____ Getting the project completed for the least amount of money**

2) ● _____ Making the Web site launch date

● _____ Determining a schedule of payment

● _____ Incorporating existing company branding (i.e., logos)

Lab 8.2: Comparing Project Management in Various Industries



Lab Objectives

After this lab, you will be able to

- Compare Web Project Management to Construction Project Management
- Compare Web Project Management to Software Development Project Management

Management of projects differs in various industries. While the Web is a new medium, and it may seem like project developers need to reinvent

the wheel, project management principles from established industries can apply to it.

Envision building a house. What kinds of factors impact that process? Are some factors unavoidable? In comparison, the Web is a much more controlled framework to build upon. Servers crash and news events can cause certain sections of the Internet to bog down. Still, how do these circumstances compare to the havoc an ill-timed blizzard can wreak upon a construction site?

Similar to constructing a skyscraper, developing a software database application can involve planning for a multitude of conditions. Many Web sites are static and uncomplicated. As time goes on, many more are offering interactivity reminiscent of the most sophisticated software applications. All of these processes can move forward within a rapid application development environment, with deadlines looming and financial limitations causing concern.

Whether one is building a mall

off the interstate or on the information highway, many of the same engineering methodologies apply. The Web project manager can build upon these methodologies and refine them to produce effective Web sites that are scalable for future enhancements.

Lab 8.2 Exercises

8.2.1 Compare Web Project Management to Construction

Project Management

When building a Web site versus a house similar?

a)

When building a Web site versus a house different?

b)

8.2.2 Compare Web Project Management to Software Development Project Management

When building a software application ver you feel are similar?

a)

When building a software application ver
you feel are different?

b)

Lab 8.2 Exercise Answers

This section gives you some suggested answers to the questions in Lab 8.2., with discussion related to those answers. Please post any

alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

8.2.1 Answers

When building a Web site versus a similar?

a)

*This may not have been an easy
hopefully the following discussion
two very different entities are ver*

*Most of the time when someone i
have a good idea that the Web is
clients don't understand how they
implementation.*

*I often use the analogy that build
I ask the client what steps he or s
building a house. The following ar*

How many rooms do I need?

How do I want the house to look?

What kind of appliances and conv

What colors do I like?

How long is it going to take?

Answer:

How much is it going to cost?

*How many of you have ever built
What kinds of things were you hoping to get
through the project? And who would be responsible for
building your house? Most likely the architect, the
general contractor/project manager, and possibly
perhaps interior decorators.*

*After the architect puts together the plans, he or she will
how many people he or she will need to build it, the
cost, and when it will be complete. The architect will
to approve work completed or the architect will
plans need to be made for those who will be building it.*

*In Web site design, instead of planning, the
project team will consist of graphic designers, web
editors. Instead of the number of people, the number of
many sections he or she needs and the number of people
What type of functionality is required, the type of
process going to take and how much it will cost.*

When building a Web site versus a house, the architect

different?

b)

There are obviously many differences building a house. But in terms of differences, as outlined in the following

Obviously, we're working in a different cost, the construction industry materials labor rates, whereas labor rates, to be the only consideration when

One always runs the risk that no client and contractor, other opinions project loop that conflict with the the client. This is why project management follows the appropriate steps in the that keeps track of approvals. The

Answer:

*cousin once removed hates the si
the client. Just as if someone say
they come back and say they wa
time? The burden shouldn't fall on*

*But because Web site design is a
understand the labor involved wit*

8.2.2 Answers

When building a software applicat
you feel are similar?

a)

Answer:

The engineering process is the same and flowcharted. Multiple conditions for implementation.

When building a software application, you feel are different?

b)

A Web site requires a graphical user interface. Web applications do not need to address the same approval process and add complexity. Web site requirements can be much more

Answer: *The biggest difference between a most Web sites are deliverable to be seen across platforms and to can*

software application is a tool that environment. It doesn't necessar configurations.

Lab 8.2 Self Review Questions

In order to test your progress, you should be able to answer the following questions:

Which of the following scenarios could cause a contractor to stop work in the software development environment:

- 1. _____ Rainy weather**

- 1)
- _____ Server hard drive crash
 - _____ Nonremittance of scheduled payment
 - _____ Sick employees
 - _____ Labor strike

Which of the following scenarios could cause a contractor to stop work in the construction industry:

1. _____ Rainy weather

- 2)
- _____ Server hard drive crash
 - _____ Nonremittance of scheduled payment
 - _____ Sick employees

- _____ Labor strike

Case No.	Case Name	Case Type	Case Status	Case Date	Case Location	Case Description	Case Notes	Case Attachments
1	John Doe	Medical	Open	2023-01-01	New York	John Doe, 45, male, reported chest pain and shortness of breath. Initial ECG showed ST-segment depression. Patient was admitted to the hospital and underwent further evaluation.	Initial ECG report, Patient history, Physical exam findings.	ECG_Report.pdf, History_Note.docx, Exam_Finding.txt
2	Jane Smith	Medical	Closed	2023-01-05	California	Jane Smith, 32, female, reported severe abdominal pain. Initial CT scan showed a large, well-defined, enhancing mass in the right upper quadrant. Patient was admitted to the hospital and underwent surgery.	Initial CT scan report, Patient history, Physical exam findings.	CT_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
3	Michael Brown	Medical	Open	2023-01-10	Texas	Michael Brown, 58, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
4	Sarah Johnson	Medical	Closed	2023-01-15	Florida	Sarah Johnson, 28, female, reported severe headache and vomiting. Initial MRI scan showed a large, well-defined, enhancing mass in the right frontal lobe. Patient was admitted to the hospital and underwent surgery.	Initial MRI scan report, Patient history, Physical exam findings.	MRI_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
5	David Wilson	Medical	Open	2023-01-20	Illinois	David Wilson, 65, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
6	Emily Davis	Medical	Closed	2023-01-25	Georgia	Emily Davis, 35, female, reported severe abdominal pain and vomiting. Initial CT scan showed a large, well-defined, enhancing mass in the right upper quadrant. Patient was admitted to the hospital and underwent surgery.	Initial CT scan report, Patient history, Physical exam findings.	CT_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
7	Robert Miller	Medical	Open	2023-02-01	Ohio	Robert Miller, 52, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
8	Lisa Anderson	Medical	Closed	2023-02-05	Michigan	Lisa Anderson, 40, female, reported severe headache and vomiting. Initial MRI scan showed a large, well-defined, enhancing mass in the right frontal lobe. Patient was admitted to the hospital and underwent surgery.	Initial MRI scan report, Patient history, Physical exam findings.	MRI_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
9	James Taylor	Medical	Open	2023-02-10	North Carolina	James Taylor, 60, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
10	Michelle White	Medical	Closed	2023-02-15	South Carolina	Michelle White, 30, female, reported severe abdominal pain and vomiting. Initial CT scan showed a large, well-defined, enhancing mass in the right upper quadrant. Patient was admitted to the hospital and underwent surgery.	Initial CT scan report, Patient history, Physical exam findings.	CT_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
11	Christopher Lee	Medical	Open	2023-02-20	Virginia	Christopher Lee, 55, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
12	Amanda Hall	Medical	Closed	2023-02-25	Washington	Amanda Hall, 38, female, reported severe headache and vomiting. Initial MRI scan showed a large, well-defined, enhancing mass in the right frontal lobe. Patient was admitted to the hospital and underwent surgery.	Initial MRI scan report, Patient history, Physical exam findings.	MRI_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
13	Kevin King	Medical	Open	2023-03-01	Arizona	Kevin King, 62, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
14	Stephanie Green	Medical	Closed	2023-03-05	Colorado	Stephanie Green, 33, female, reported severe abdominal pain and vomiting. Initial CT scan showed a large, well-defined, enhancing mass in the right upper quadrant. Patient was admitted to the hospital and underwent surgery.	Initial CT scan report, Patient history, Physical exam findings.	CT_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
15	Brandon Hall	Medical	Open	2023-03-10	Idaho	Brandon Hall, 57, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
16	Nicole Adams	Medical	Closed	2023-03-15	Montana	Nicole Adams, 37, female, reported severe headache and vomiting. Initial MRI scan showed a large, well-defined, enhancing mass in the right frontal lobe. Patient was admitted to the hospital and underwent surgery.	Initial MRI scan report, Patient history, Physical exam findings.	MRI_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
17	Gregory Baker	Medical	Open	2023-03-20	Nebraska	Gregory Baker, 63, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
18	Heather Clark	Medical	Closed	2023-03-25	Oklahoma	Heather Clark, 39, female, reported severe abdominal pain and vomiting. Initial CT scan showed a large, well-defined, enhancing mass in the right upper quadrant. Patient was admitted to the hospital and underwent surgery.	Initial CT scan report, Patient history, Physical exam findings.	CT_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
19	Timothy Lewis	Medical	Open	2023-04-01	South Dakota	Timothy Lewis, 59, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
20	Christina Walker	Medical	Closed	2023-04-05	Tennessee	Christina Walker, 34, female, reported severe headache and vomiting. Initial MRI scan showed a large, well-defined, enhancing mass in the right frontal lobe. Patient was admitted to the hospital and underwent surgery.	Initial MRI scan report, Patient history, Physical exam findings.	MRI_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
21	Jonathan Young	Medical	Open	2023-04-10	Utah	Jonathan Young, 61, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
22	Kimberly Allen	Medical	Closed	2023-04-15	Connecticut	Kimberly Allen, 36, female, reported severe abdominal pain and vomiting. Initial CT scan showed a large, well-defined, enhancing mass in the right upper quadrant. Patient was admitted to the hospital and underwent surgery.	Initial CT scan report, Patient history, Physical exam findings.	CT_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
23	Benjamin King	Medical	Open	2023-04-20	Delaware	Benjamin King, 56, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
24	Angela Wright	Medical	Closed	2023-04-25	Massachusetts	Angela Wright, 31, female, reported severe headache and vomiting. Initial MRI scan showed a large, well-defined, enhancing mass in the right frontal lobe. Patient was admitted to the hospital and underwent surgery.	Initial MRI scan report, Patient history, Physical exam findings.	MRI_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
25	Christopher Lee	Medical	Open	2023-05-01	New Jersey	Christopher Lee, 54, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
26	Michelle White	Medical	Closed	2023-05-05	New York	Michelle White, 30, female, reported severe abdominal pain and vomiting. Initial CT scan showed a large, well-defined, enhancing mass in the right upper quadrant. Patient was admitted to the hospital and underwent surgery.	Initial CT scan report, Patient history, Physical exam findings.	CT_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
27	Christopher Lee	Medical	Open	2023-05-10	California	Christopher Lee, 54, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	Chest_Xray_Report.pdf, History_Note.docx, Exam_Finding.txt
28	Michelle White	Medical	Closed	2023-05-15	Texas	Michelle White, 30, female, reported severe abdominal pain and vomiting. Initial CT scan showed a large, well-defined, enhancing mass in the right upper quadrant. Patient was admitted to the hospital and underwent surgery.	Initial CT scan report, Patient history, Physical exam findings.	CT_Scan_Report.pdf, History_Note.docx, Exam_Finding.txt
29	Christopher Lee	Medical	Open	2023-05-20	Florida	Christopher Lee, 54, male, reported persistent cough and weight loss. Initial chest X-ray showed a large, well-defined, enhancing mass in the right upper lobe. Patient was admitted to the hospital and underwent further evaluation.	Initial chest X-ray report, Patient history, Physical exam findings.	

Lab Objectives

After this lab, you will be able to

- [Identify Creative Tasks](#)
- [Identify Technical Tasks](#)
- [Identify Administrative Tasks](#)
- [Identify Marketing Tasks](#)
- Identify Editorial Tasks

The skills required to develop a Web site are involve a team approach. This is because a the artistic, content-development, and tech project by himself or herself. It's unusual to and it's also unusual to find a Web developer graphic designer, programmer, and editor.

Thus, most project managers find themselves with widely diverse skill sets. How that all comes out is discussed in [Chapter 9](#). However, for our purposes, project tasks involved with creating a Web site fall into two categories these tasks fall.

At this stage, when tasks are identified, the project manager has a "list" than to devise a highly specialized how to do it. Once the tasks are identified, the project sponsor and project team (i.e., the artistic team head with the programming team head writes the technical specifications. Therefore, the project manager needs to develop a plan that all members have a chance to review it, specify the tasks, and the project manager can devise a budget and schedule.

Lab 8.3 Exercises

For the following exercises, envision a project to create a school's Web site, which would include a database of students, to attract new students, provide a foundation for the school about the Web, and provide information for

8.3.1 Identify Creative Tasks

How would you identify the creative tasks they be? Do not be concerned if you have a Web site. What elements might be considered creative roles?

[illegible]

What would you ask the client about how
look if you had the opportunity?

b)

8.3.2 Identify Technical Task

How would you identify the technical tasks they be? What type of contributions to the your programming team?

a)

What would you ask the client about his opportunity?

b)

8.3.3 Identify Administrative

How would you identify the administrative tasks that would they be? Consider how an office might handle filing, answering client inquiries, and subscription management. What tasks have to take place in the background so that the main tasks can take place in the foreground?

a)

What questions would you ask the client about administrative concerns?

b)

8.3.4 Identify Marketing Tasks

How would you identify the marketing tasks they be?

a)

What would you ask the client about his opportunity?

b)

Lab 8.3 Exercise Answers

This section gives you some suggested answers

discussion related to those answers. Please ask any questions at the companion Web site for this book at <http://www.phptr.com/phptrinteractive>.

8.3.1 Answers

How would you identify the creative team? Do not be concerned if you have not visited the companion Web site. What elements might be considered creative roles?

a)

Creative tasks can be defined by inter requirements with the creative team. tasks involved in developing this Web

- *Identify the content What do w*
- *Determine the deliverable schedu supplied to the Web firm in order implementation date?*
- *Graphic design What do we wa*
- *Develop the content Write and*
- *Edit the content How would the Let's refine it.*
- *Create prototypes Put composi together to create a working moc*
- *Work with the technical team to*

Refine the prototypes into the final design

When building any Web site, there are several design decisions that must be developed. Therefore, the developer needs to know what is going to be delivered and how much of it. The only way to do this is to require the school to provide a style guide (see [8.3.1.b](#)).

The developer understands that the site will be used by a wide range of people, as well as for prospective students and those visiting the site will have varying access to different browsers on their computers.

The graphic design must be attractive and functional. The developer should make the best use of image size so that the site loads quickly. The developer should also make the best use of any available space. The developer should use mascots and other things that are uniquely identifiable to the school.

Written content should be developed by the school and edited by the Web firm. The school should be responsible for editing Web-based communication. The developer should be familiar with the concepts contained in the style guide.

Bobby Web Accessibility Analysis Tool: [ww](#)

IU Web Site Design Guidelines: [www.iuinfo](#)

All Things Web: [www.pantos.org/atw](#)

Guide to Web Style: [www.sun.com/stylegu](#)

8.3.2 Answers

How would you identify the technical tasks they be? What type of contributions to your programming team?

a)

Technical tasks would be defined by initial requirements with the technical team.

A1: *tasks involved in developing this Web site*

Identify database requirements.

Identify additional interactive elements.

Identify server requirements.

Program the site.

Test the site.

Stage the final site.

A database programmer should evaluate the Web site requirements so that decisions can be made regarding the server, its operating system, and database middleware. NT platforms offer SQL server and Access database solutions. The preferred database for UNIX

servers is Oracle or MySQL. Oracle can be used for databases with 80,000 records and above. However, the site license is expensive. MySQL is available as a free download and offers a stable environment for databases with up to 80,000 records. Based on database and any additional interactive requirements, a decision can be made regarding the server.

The following sites, particularly CAST.org, are very useful for developing a site that is widely accessible by the general public. A school Web site should pass

the "Bobby" test a Web-based tool that evaluates sites for accessibility to people with disabilities and international users and for compatibility with various browsers.

Bobby Web Accessibility Analysis Tool:

www.cast.org/bobby

IU Web Site Design Guidelines:

www.iuinfo.indiana.edu/policy

All Things Web:

www.pantos.org/atw

Web Content Accessibility Guidelines:

[www.w3.org/TR/WAI-
WEBCONTENT](http://www.w3.org/TR/WAI-WEBCONTENT)

b)

What would you ask the client about his or her technical goals if you had the opportunity?



A2:

Please define your basic goals for the Web site.

What are the schedule requirements?

How often will content be updated? By whom?

Which Web sites do you like from a technical

standpoint?

Please storyboard your site and show how you envision it working.

How many library records are there?

How would you like the database to be searched?

Do you have any requirements regarding the server the site must be staged upon? Or is Web hosting at the Web firm's

discretion?

Are there any other interactive elements that you would like to include on the site (i.e., a bulletin board or chat room)?

8.3.3 Answers

How would you identify the administrative tasks that would they be? Consider how an office filing, answering client inquiries, and such tasks have to take place in the background and foreground?

a)

*Administrative tasks would be defined
firm owner (or whoever has authorizat
A1: and discussing requirements with the p*

Defining the project

Estimating the project

*Tracking contracts, work
orders, and change orders*

*Developing project
schedule/budget*

Coordinating resources

Communicating with the client

*Administrative tasks are
traditionally performed by the
project manager. Techniques
for performing these functions
will be examined in depth in
later chapters.*

b)

What questions would you ask

the client that might impact on these administrative concerns?

A2:

Please define your basic goals for the Web site.

What are the schedule requirements?

Are there any existing collateral materials from which logos and content can be derived?

Who will be supplying content?

How often will content be updated? By whom?

Which Web sites do you like from a graphical standpoint?

Please storyboard your site and show how you envision it working.

Which Web sites do you like from a technical standpoint?

How many library records are there?

How would you like the database to be searched?

Do you have any requirements regarding the server the site must be staged upon? Or is Web hosting at the Web firm's discretion?

Are there any other interactive elements that you would like to include on the site (i.e., a bulletin board or chat room)?

What is your budget for the site?

Do you require a flat bid

or will you consider paying for time and materials?

What is your plan for marketing the site? Do you need the firm to facilitate and/or consult regarding marketing?

Are there plans for a later version of the site?

What is your availability for project meetings?

Who will be responsible for signing off on the work?

In other words, the project manager needs to have a broad view of the project so that he or she can adequately estimate the project and manage it cost-effectively. While the specifics can be micromanaged by creative, technical, and marketing team leaders, the project manager will need to be aware of all the schedule benchmarks and whether the project is progressing on budget, making adjustments as necessary.

8.3.4 Answers

How would you identify the marketing they be?

a)

Marketing tasks would be defined by in requirements with the marketing team

A1:

Analyzing current public relations

Recommending free on-line marketing options (i.e., search engines, reciprocal linking, banner swaps)

Identifying cost-effective marketing options (i.e., links from town page, tile and banner advertising, search engine placement, targeted e-mailing)

Writing press releases

Submitting the Web site to the seven major search engines

b)

What would you ask the client about his or her marketing goals if you had the opportunity?



A2:

What kinds of marketing programs are already in place for the school that could be modified to include the Web site address?

What is the budget for marketing the site?

Since prospective students would come from local communities, are there any local Web sites that would drive traffic to the

school site?

Are there any educational Web sites that might drive traffic to the school Web site?

What kind of traffic do you expect?

Lab 8.3 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

Which of the following creative tasks would need technical input:

1. _____ Large animation on the front page

- _____ Buttons that change when the pointer is put over them

1)

- _____ Inclusion of company logo
- _____ Embedding of multimedia objects
- _____ Inclusion of sales versus product information

Which of the following marketing tasks would require creative input:

1. _____ Banner advertising on

major search engines

- _____ Keyword identification

- 2) ● _____ Exchange of links with noncompetitive Web sites

- _____ Identifying paid-for links with city- and industry-related guides (e.g., townonline.com)

- _____ Drafting of press releases

[illegible]

Lab Objectives

After this lab, you will be able to

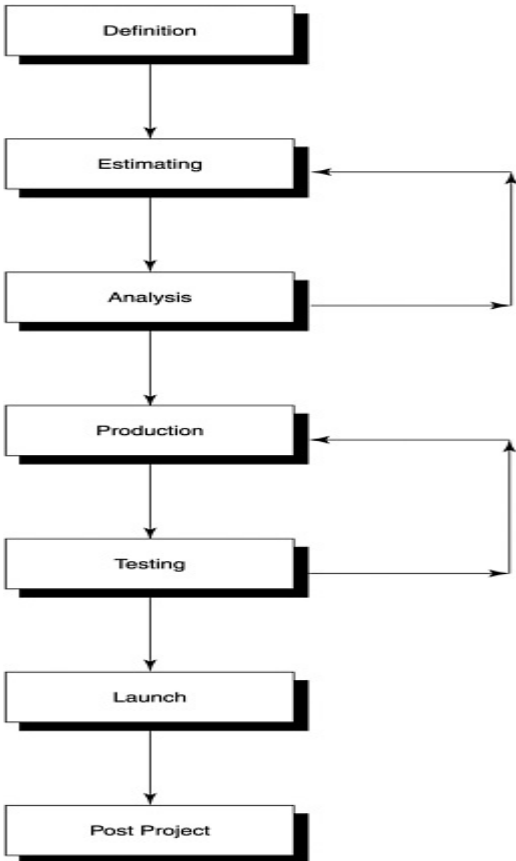
- [Understand the Flow of Project Events](#)
- [Identify the Team Members Involved](#)

Coordinating a large Web project is a bit like a skater's movements are fluid and smooth, a manager. Still, how many times did the ice skating manager Lutz? Many of us who have managed a lot of projects are motivated to write books on the subject of managing projects perfectly. Rather, I can vouch for a difficult client as well as the first time I ran into similar situations since? Absolutely! However, a successful track record can do a lot to help overcome moments of doubt and refocus on the project.

While creative, technical, administrative, and

undertaken, the timing of these events can be defined. The designer should not complete a navigation system until it is defined.

There are distinct phases to a Web project: contract, analysis, production, testing, launch, and postproject analysis. Postproject analysis can be best accomplished by the team that built the site. It lends itself to team building. The definition, analysis, and production phases may need to be repeated as



It is more cost-effective to reestimate and further analysis, the project entail more exp originally included in the budget than to deal the production phase. Conversely, testing n that need to be corrected. Thus, one phase the other.

Lab 8.4 Exercises

Using the example of the school Web site ir determine which project management task project phases and who would perform the

8.4.1 Understand the Flow of

For each of the following phases, identify th feel should be performed.

Definition Phase

a)

Estimating Phase

Analysis Phase

c)

Production Phase

d)

Testing Phase

e)

Launch Phase

f)

Postproject Analysis Phase

g)

8.4.2 Identify the Team Mem Project Phase

For each of the following phases, list the ten most appropriately involved.

Definition Phase

a)

Estimating Phase

b)

Analysis Phase

c)

Production Phase

d)

Testing Phase

e)

Launch Phase

f)

Postproject Analysis Phase

g) _____

Lab 8.4 Exercise Answers

8.4.1 Answers

For each of the following phases, identify the feel should be performed.

Definition Phase

a)

The definition phase entails only learning to estimate cost. Many Web firms could be drafting lengthy proposals and responses. This is a piece of the process that needs to be defined. The firm that the client firm will be awarded only a percentage of the total billable upon. The time spent defining the potential project is not billable. Therefore, this is not an inconsequential task. It should be taken to identify the scope of the project and to establish a limit on time spent pursuing the project.

A1:

Tasks in the definition phase might include:

Reviewing the RFP, if available

Interviewing the client

Asking the client to complete a project questionnaire that is faxed to the

Determining quality of competitor presence

8.4.2 Answers

For each of the following phases, list the team members who you feel would be most

appropriately involved.

Definition Phase

a)

A1: *Project Manager*

Estimating Phase

b)

A2: *Project Manager, Creative Team Manager*

Analysis Phase

c)

A3: *All Team Members*

Production Phase

d)

A4: *Project Manager, Creative Team, Tech*

Testing Phase

e)

A5: *Project Manager, Quality Assurance Te*

Launch Phase

f)

A6: *Project Manager, Technical Team, Qua*

Postproject Analysis Phase

g)

A7: *All Team Members*

Lab 8.4 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

How do you see the project manager's role in the development of a Web site? Which of the following is he or she most similar to?

1. _____ A coordinator

- 1)
- _____ A negotiator
 - _____ A team advisor
 - _____ An administrative assistant
 - _____ A multidisciplinary Web developer

Which of the following phases does the project manager *not* play a major role in?

1. _____ Estimating

- 2)
- _____ Analysis
 - _____ Design

- _____ Production
- _____ All of the above

Chapter 8: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

How would you manage a situation in

1) which the client begins bringing up definition/analysis issues while the project is in the production phase?

What kinds of documentation might help you to track what has been agreed upon by both the client and the developer?

2)

Chapter 9. The Project Team



"The sum of its equal parts is greater than the whole."

Chapter Objectives

In this chapter, you will learn about

✓ [Definition of the Project Team](#)

✓ Team Dynamics

Before a Web firm can contract for projects, a solid working team must be in place. Some firms are made up of one or two people. However, as the projects themselves or the volume of projects get larger, the Web firm relies on more team members to roll them out. As the size of the firm grows, so does the number of human interfaces, which can either benefit a project or bog it down.

Speaking from experience, I can say that it takes a long time to build a reliable team that can react fluidly to project events. Finding talented individuals, who wish to enhance the firm, is difficult. However, as the firm's reputation builds, so do the reputations of the team members. Commitment to teamwork benefits everyone.

Members of the team may be coming from different places. Some may be subcontractors, brought in for a specific project. Others may be long-time

employees. When assembling a team, the project manager must make the decision regarding human resources. However, I always follow the paradigm to contract on the project first and then hire or subcontract the personnel later. One may want to keep abreast of which subcontractors are available at any given time. I'm often in touch with my subcontractors every week or so and am aware of their schedules. However, subcontractors get very tired of dealing with firms that take

their time describing a project, ask about the subcontractor's schedule, and then award the contract elsewhere. I say very little or nothing to my subs until a project is ready to be contracted. I feel that to do otherwise falls into the same category of a potential client who keeps calling the firm, bending everyone's ear, but never will commit on contracting the project. After a while, no one takes them seriously. This subject is discussed in [Chapter 10](#).

The project manager's

leadership skills will come into play when dealing with all of these constituencies. He or she must be willing to listen, have excellent communication skills, be task oriented while satisfying the needs of the team members, model good team conduct, and be able to address negative undercurrents fairly. The project manager may not only find himself or herself as a mediator between the firm and the client, but between team members as well. Therefore, an ability to rise above a given conflict and

not take issues personally is not only a desirable trait in a project manager but rather necessity to keep the team in working order.

I used to take criticism to heart. As the owner of a new Web site development business, I felt crushed whenever anyone had anything to say that was less than positive within my team. In several cases, I had to build the confidence to know whether I was dealing with my problem or someone else's. With experience comes a track record of success and an innate

ability to determine the impetus for the disagreement. I am also much better at assembling my team now because I know what to look for in a potential team member.

It's quite simple when I start thinking about the challenges of dealing with a particular team member more than the challenges that the projects are presenting, I know that it's time for that team member to go elsewhere. This comes with experience. The more you deal with Web development people, the easier it is to select

individuals who will fit in best
on certain projects.

Lab 9.1: Definition of the Project Team

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Lab Objectives

After this lab, you will be able to

- [Define the Writing Process](#)
- [Define the Artistic Process](#)
- [Define the Engineering Process](#)
- [Define the Marketing Process](#)
- [Determine How Divergent Processes Interface](#)

A Web development team is made up of people. These people are not programming

languages, skill sets, or marketing techniques. Rather, these people possess multidisciplinary experiences, which they must rely upon to converge with those of other team members and thus to build one Web site seamlessly. Therefore, despite multidisciplinary skills, each team member must be able to communicate and educate the others and have their own speciality, upon which they can be the last word.

Truly, the exciting point about project teams is their diversity.

The various processes required when building a Web site involve different ways of thinking. This is an asset to a peer-to-peer supervised team, because these types of teams become goal oriented as opposed to self-oriented. Team members can appreciate one another's strengths without being threatened. Each team member has his or her own area of expertise, which cuts down on competition.

The graphic designer is concerned about how the Web site is going to look. The editor

is focused on what the site communicates. The programmer wants to be sure that all of the programs work. Lastly, the marketing team leader is concerned about making users aware of the Web site's presence so that the client benefits from it.

People who specialize in these areas—graphic design, editing, programming, and marketing—rely primarily on different sides of their brains. People are primarily left- or righthanded, and many individuals favor different sides

of their brain. The left brain hemisphere works primarily with analysis, language, reason, and computation; the right side processes intuitive, imaginative, and artistic operations.

Thus, the project manager must be aware of how the team is arriving at their conclusions and the process by which this happens.



The Whole Truth

A superior skill set for a project manager to possess would be writing, editing, graphic design, programming, and marketing experience. I often refer to someone who can accomplish all of these tasks well as being ambidextrous, in that the individual is equally comfortable with both left and right brain activity and does not seem to favor one over the other.

This ambidextrous trait can assist the project manager in understanding what is taking place within the project team. Considering the challenges each member faces and what motivates them allows the project manager to facilitate project tasks.

The project manager's job is not to supervise autocratically, but rather to coach, educate, and encourage team members, respecting each individual as an expert in his or her own field. By providing structure for the team to work as independently as possible, the project manager helps the team develop its mission and identify the goals it wishes to accomplish. As a football team has a coach and an orchestra has a conductor, a Web site development team has a

project manager a person with the view of the big picture, but who isn't necessarily running the ball or playing the violin. Thus, the project manager helps the team define its mission and provides benchmarks and clear goals through which the team can gauge its success.

The purpose of the following exercises is for the project manager to understand the various processes involved within the team. This by no means assumes that the project manager has to be an

expert writer/editor/graphic designer/programmer/marketer, but rather that he or she gives thought to the challenges faced by team members performing these tasks.

Lab 9.1 Exercises

9.1.1 Define the Writing Process

Write a simple paragraph that details the (fictional) Web firm offers. After the para

created it.

a)

9.1.2 Define the Artistic Process

Draw a company logo for your brand ne
you created it.

a)

9.1.3 Define the Engineering Process

If you wanted to show prospective customers how you produce cutting-edge programs, how would you describe the process by which you determined the

a)

9.1.4 Define the Marketing Process

If you were to market your new firm's V detail the process through which you de

a)

9.1.5 Determine How Divergent Processes Interface

Describe strategies through which you w
artistic, engineering, and marketing proc

a)

Lab 9.1 Exercise Answers

9.1.1 Answers

Write a simple paragraph that describes a (fictional) Web firm you would like to create. After that, write a paragraph that describes a Web firm you would like to create.

a)

The purpose of this exercise is not to identify the process involved in creating a Web site.

Often, the hardest thing about writing is to develop a bad habit of self-editing. However, this habit can inhibit the creative process.

I notice that when clients try to design their Web site, it seems that they often write. Most people have heard of the "Just Do It" philosophy. Often, dealing with when trying to produce a Web site.

When trying to motivate writers, Nike's "Just Do It" philosophy. First, paper and worry about the editing process.

Answer:

It helps the writer first to define the piece and then decide which steps are accomplished, writing the first draft to follow.

It's best to have a team member check for grammar, and content. (As discussed in the previous section, this is different from writing for other media.) Add appropriate links to helpful Web sites to add depth to the piece by incorporating research.

The following link is very helpful to the Writer's Toolbox <http://dlc.tri-c.edu/writingcenter/>

9.1.2 Answers

Draw a company logo for your brand that you created it.

a)

I've worked with several great graphic designers, and I think that graphic design seems to be a natural talent for some designers with a bit of awe.

Somewhere along the way, a lot of people develop with the desire to create images. I remember my elementary school-age sons creating a drawing of the refrigerator, and all over my life, I've seen attempts at drawing. My sons this

certainly do. However, I know the crayons, construction paper, and often.

Even kids, who have trouble with programs on the computer, which heads without struggling with the

Answer:

As people get older, they seem to artwork and stop developing this that we just can't draw that we've the caution that we hid our teenage

Therefore, I always ask the graph with their ideas. It may be that I given themselves permission to c opinions. As with writing, this see

The consensus among designers start with a picture in their head. brainstorm with the client and with visualization. Designers can then there is a baseline for comments, the final product.

9.1.3 Answers

If you wanted to show prospective clients that your company can produce cutting-edge programs, I would focus on the process by which you determine the needs of your clients and how you tailor your programs to meet those needs. This process involves a deep understanding of your clients' business and a commitment to ongoing communication and collaboration.

a)

While creative people need to list intuition, programmers come at the perspective. Their world is black and white palette that the Web has to offer. When they are concerned, the Web site programmer isn't the end of story.

A typical conflict between a graphic designer and a programmer is the use of a complex animation. That graphic designer has ever created on her local machine. However, the programmer is concerned about the artistic value. He or she is going to tell the user when many users are still using a slow machine. The designers who are new to the Web are not aware that the Web is not optimized for this medium.

Answer:

Therefore, the programmer is going to tell the user when many users are still using a slow machine.

requirements and risk analysis up going to work well on a middlewa to break down and get Oracle lice on time? Many new software tool few of them actually deliver.

As my primary training was in ele conservative, almost skeptical ap firms espouse their cutting-edge , client with tried and true methods implementation on time and on b correctly. I'm focused on using cr be beta testing XML and some of them with a client until those env

9.1.4 Answers

If you were to market your new f

detail the process through which v

a)

*Marketing is one of the most imp
marketing team is often dealing v
puts him on a level playing field v
clients understand that the amou
site will have a lot to do with its s
my firm, we always state that a l*

plan. If it's to be a standalone venture, it needs a way to support it.

What about branding? The marketing team needs to be sure that the brand is consistent throughout the site, reiterating the brand concept that most people must see. The brand finally sinks in. It also might explain the importance of television, in which one commercial can be shown during a specific time slot.

The marketing team must determine the best way to get the message out there about this new venture. This can be done through e-mails, banner advertising, links from other Web sites, and advertising. There are also the old-fashioned ways of the Web site address out to prospective customers, cards, brochures, and letterhead. The key is the existence of the Web site.

Answer:

The marketing team is concerned with the way the brand is communicated subliminally to messages. What's the point of you ever seen a billboard with just a name? It's not meant. The billboard grabs your attention. Then the billboard is redone with

certainly grabs interest.

We've all seen teasers that may say, "what's coming?" Then, in a few weeks, it'll be here!" "Well," we think, "I know!" Several messages later, word of announcement comes out that "J. Dreamcoat" is being staged at our theater. It's effective — much more effective than a flier that said, "Acme Elementary School Presents Technicolor Dreamcoat." At this point, we're giving me daily reminders. We'll be

The marketing team has to psych themselves out on how to pique their interest. Meeting with them and understanding how this business can help give the Web firm a jump

9.1.5 Answers

Describe strategies through which artistic, engineering, and marketing

a)

As you can now see, there are many ways to approach a Web site project. How does it all work?

It's simple. Each member has to contribute. The engineering department says they can't do it, the creative department has developed a plan, and the marketing department needs to work together to come up with a solution.

constituency.

Answer: *If marketing feels that creative has enough within the site, there needs to be a balance. If creative feels there isn't enough 'respect', other departments need to respect creative's autonomy.*

Someone has to have the last say. It's the project manager. This is why it's important to have a project manager with the challenges each member faces. If everyone has a little respect and some say, it works. More can be discussed in the next lab.

Lab 9.1 Self-Review Questions

The creative and technical teams can

have differing objectives which the project manager must help to

1) coordinate

1. _____ **True**

● _____ False

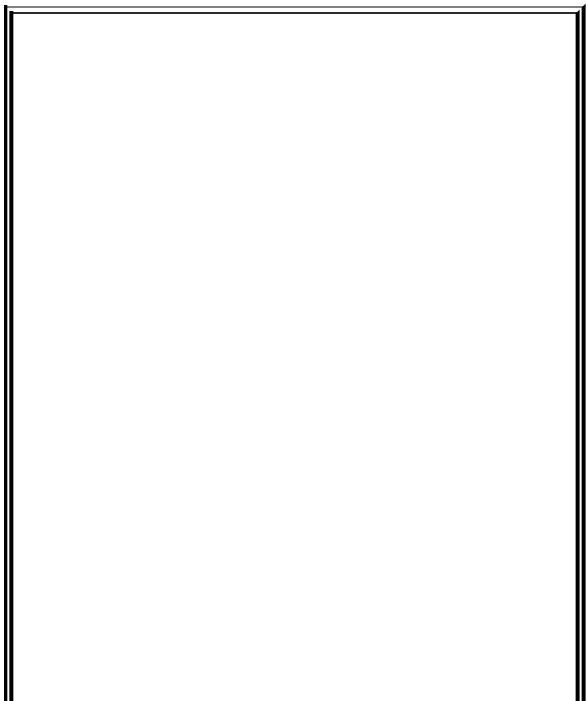
By understanding the various processes involved with creating a Web site, the project manager can help the project team to create the site faster.

2)

1. _____ **True**

● _____ False

Lab 9.2: Team Dynamics



Lab Objectives

After this lab, you will be able to

- [Strategize for Conflict Resolution](#)
- [Facilitate Positive Communication within the Team](#)
- [Build Team Enthusiasm for a Project](#)

Anyone who has ever been part of a poorly functioning company will attest to how unresolved conflicts affect productivity. Senior-level team

members who are impatient with mentoring more inexperienced members can generate resentment, especially if they are responsible for challenging the junior-level members with new tasks.

As a junior-level team member, I was very lucky to work in both the best and the worst of these environments. My best experience was working in a large corporation at a time when a great deal of excitement was building around its products. There were two

junior-level analysts, myself included, assigned to a senior-level analyst, who was a demanding but excellent teacher who truly cared. The relationship I had with the other junior-level analyst was based on mutual respect, and we were careful to keep things light. Mistakes could be made, because we were learning, but both of us were determined to help the other. I can't ever remember any undercurrent of hostility or flexing of egos.

Having just come from an environment in which I had

difficulty gaining support from other junior-level members and finding a mentor among the senior staff, I breathed a sigh of relief in my new position. I also had a benchmark by which I could appreciate it, which probably improved my willingness to have things go well. Many years later, I still regard that working environment as being one of the most pleasant I have had. As a result, I have tried to promote a positive environment within my own firm, an environment in which

each individual feels valued and his or her skills are fostered. In doing so, I have thought a great deal about communication and how easily it can break down. Often, I have found that if people only know each other on the level of their skill sets, as opposed to having a more three-dimensional relationship, it's easy to be uncharitable should a misunderstanding occur. Establishing a good rapport among team members is key to running a well-functioning project.

Santech Corporation, a manufacturing firm located in Fort Worth, Texas, reached a point where it had to take a hard look at how work was being performed and decided to adopt, in some areas, self-supervised teams, very similar to how most software development firms operate. Santech had found that when there were supervisors on the team, individual team members did not take the initiative to accept responsibility. Rather, the supervisor maintained vertical pressure downward and

became the fall-guy when things went wrong, as opposed to the group sharing and being invested in the outcome. The supervisor took on the role of project manager and became the "go-to" person when problems arose. By implementing a self-supervised approach, all team members shared in the failure or success of a project. All team members were made accountable, instead of just the supervisor.

At Santech, the teams provided horizontal peer pressure to ensure completion of project

tasks. If one member was not performing, another team member might speak to him or her and then speak to the project manager if there was no improvement. This shared leadership clearly identified bottom performers through peer review.

Once the implementation of this process was through, the executives at Santech said, "Moving equipment is easy. Moving the minds of people is difficult." This is just what the project manager is responsible for moving the minds of the

team and the client, communicating the common goals, so that team members can hold themselves accountable for meeting those goals.

As discussed in [Chapter 8](#), major deadlines and tasks can be defined so that the project can move forward in a logical manner. Teams break down when individuals are unclear about expectations. By being task oriented during conflicts, instead of allowing disagreements to deteriorate to a personal level, each team

member becomes aware of the big picture.

Lab 9.2 Exercises

9.2.1 Strategize for Conflict Resolution

Offer three techniques for helping two to complete a project task, with the goal of an event

a)

9.2.2 Facilitate Positive Communication within the Team

Describe three tools you would use to facilitate the building of a project. Your goal is to improve communication among team members.

a)

9.2.3 Build Team Enthusiasm for a Project

Describe three techniques you would use to build team enthusiasm for a project and keep it flowing through until the project is completed.

a)

Lab 9.2 Exercise Answers

9.2.1 Answers

Offer three techniques for helping a project task, with the goal of ar

a)

A running joke in my firm is that I run out to one of our clients' restaurant for a piece of Chaos pie. I am blessed with a car that starts well and knows when it's time to stop. I have two, so we can come back with a

Keeping the atmosphere light, when project demands, can be a delicate

There are several types of project meetings. In the first, everyone informed and thus heads in the same step toward conflict resolution before the meetings.

The Project Status Meeting: *At the start of the meeting, allowed ten minutes to report on progress. There should be no brainstorming at this point. The project manager everyone up to speed on the project and the issues that need attention.*

The project manager needs to be clear on the status of how client approvals are progressing.

The project manager should develop

the letter. No one is allowed to interrupt the conversation until that individual has finished their minutes.

The agenda is used as a working document, recorded, an action item attached to it), or a note to continue the discussion at the next status meeting, when more

This type of meeting has the strict discipline of at least weekly, so that all team members attend this kind of disciplined meeting more often, creating a more and productive office atmosphere without some of the stronger personalities dominating the meeting.

Brainstorming Meetings: *When I take minutes in a status meeting, I often find that it belongs outside this particular meeting, or three team members are hashing out a problem, or a team member, who is not involved in the discussion, takes their time, and it is nonproductive.*

A brainstorming meeting is where

together and discuss the issues a difference is, if this is a creative i this meeting, without holding the

As with the status meeting, each being interrupted. Still, no one me meeting. All members need to be kind of exchange? There are a few

Answer:

- Specifically ask for each per
- Conduct a vote, once everyo

I find that most conflicts between other feels that he or she hasn't l vocal and dominant. The other te being provided the format in which steamrolled by a stronger person. meetings in which everyone is he circumvent a lot of this. Action it everyone is given a chance to spe individuals feeling that their emp another individual, which builds re

everyone in check.

Perhaps a way to improve the relationship is to send them off to lunch together with a fair set of ground rules for their work. Each person should state what is going wrong and what each other is doing to circumvent the problems.

Make the individuals aware that it isn't going smoothly and that you have different differences. There should be a set of ground rules. Part of their job responsibility is to respect this other person. By leaving it to them, they feel that he or she is being treated unfairly. Let them come up with the ground rules. Make them aware that it is their responsibility and the consequences if this conflict is not resolved.

When teams are working closely together, it's the worst things that a project manager can do is to create conflict. Inevitably, one side will win. Favorites or taking up a personal vendetta. A friend once advised me to "take the time to offering tools to facilitate a meeting."

the project manager will hopefully

A third way to deal with conflict is Obviously, this isn't the preferred was witness to a situation in which was so great that it filtered down effected productivity every day. It affect everyone. In a professional have the opportunity to become €

However, if conflict has become t pulled into it and categorized acco whether they know it or not. It's p best to start fresh with new peop

9.2.2 Answers

Describe three tools you would use

the building of a project. Your goal is to reach a consensus among team members.

a)

The best way to get all team members to follow the rules. Protocols, such as deciding how everyone will communicate and set deadlines give team members the

A second way to facilitate communication is the creation of a project site. In Secret 10 gives a great example of how a project manager can get team members working in remote locations to complete their developments. Check out <http://www.projectsite.com> a working project site.

Answer:

*The third method is to run meetings
Regular and efficient communication*

*Thomasina Borkman, an instructional
wonderful case study regarding teaching
based on her Small Groups Dynamics
excerpts are included here.*

Case Study of Two Poorly Functioning Teams

Overall, both teams completed their assignments on time but at great personal cost to some members because other members could not be counted on to do their work in a timely manner, among other factors. I characterize both teams as poorly functioning. A number of factors are involved in the lack of effective functioning of the team.

Team A

A subgroup of four of the seven members of Team A consistently worked on the team project throughout the course of the semester. The other three members appeared briefly in the beginning and then

dropped out for shorter/longer periods in the middle. One of these three members assumed an ambiguous leadership role at the beginning of the course, then dropped it, which was confusing to other members. His idea for the project was accepted reluctantly after several other project ideas had been debated. He then became unavailable to guide the development of his project idea. He will be named All Talk (little action) in this paper, which is how his teammates characterize him.

Leadership

Were there too few leaders, too many leaders, or a lack of legitimate leaders (whose authority as leaders was agreed upon by the members)? Interviews revealed that one had the opinion that there were too many leaders, others that leadership was problematic, or team members had different perceptions about who were legitimate leaders of the group.

When members of a group have such different perceptions of what is going on, it indicates a problematic area and a lack of consensus. In well-functioning groups, members agree for the most part on what are the authority, role, and communication structures of the group and how they operate.

At a face-to-face (f2f) meeting early in the semester that was not attended by everyone, consensus was reached among attendees that two women, the Caretaker (who telephoned people about activities and urged them to keep participating), and the Organizer (who kept the group moving forward with its project), would be the leaders. Nonattendees did not necessarily know about this consensus of leadership and one isolate never did realize two women had been "elected" to be leaders.

All Talk's idea for the project was

reluctantly accepted after several other ideas were discussed, and one idea at least discarded. The Functioning Subgroup (see sociogram discussion below) expected All Talk to take the initiative in guiding the development of the project since it was his idea and others had no clear idea of his vision and how to implement it. He then disappeared and did not perform a leadership role of guidance, which became very frustrating to the Subgroup.

Communication

The members had different perceptions about whether or not the instructor encouraged teams to interact only on line or whether or not he encouraged or sanctioned f2f meetings. The female nerd had a difficult schedule and had selected the course partly because she would not have to show up on campus; she did not regard f2f meetings important until late in

the course, when so much nonaction, conflict, and problematic group functioning changed her mind. She did meet at least once f2f. However, she kept in touch with the group otherwise. She complained that people who did not attend f2f meetings were not notified on the Discussion Tool (the discussion tool was a Web based bulletin board provided by the Virtual School) as to decisions taken at meetings.

The idea of using the Discussion Tool as the primary means of communicating group decisions was discussed and agreed upon by some members. An assumption was made that the other members agreed to this decision and would abide by it. But they did not, and the Discussion Tool was only sporadically used as a major means of communicating group decisions.

Decisions taken at f2f meetings with only a few members present were not reported on the Discussion Tool to update missing members.

All Talk appears to have almost unilaterally decided to have f2f meetings at his house near campus without consulting members about preferences for where to meet, how often to meet, etc. A number of times f2f meetings were scheduled at his house at the beginning of the semester, but people were not notified in time, or they could not come and no accommodations were made to their schedule, or they did not notify anyone they were not coming to the meeting. A lot of chaos! In one case Organizer female showed up at All Talk's house for a scheduled meeting and even he was not there! Part of the chaos stemmed from not following through on the agreement to use the Discussion Tool as the primary means of communication to the entire team.

The experience of this team with inadequate and missed communication illustrates that even if a team develops a

norm to use the Discussion Tool as primary team communication, if they don't in fact use it for team communication, they might as well not have the norm. This appears to be the situation with this group.

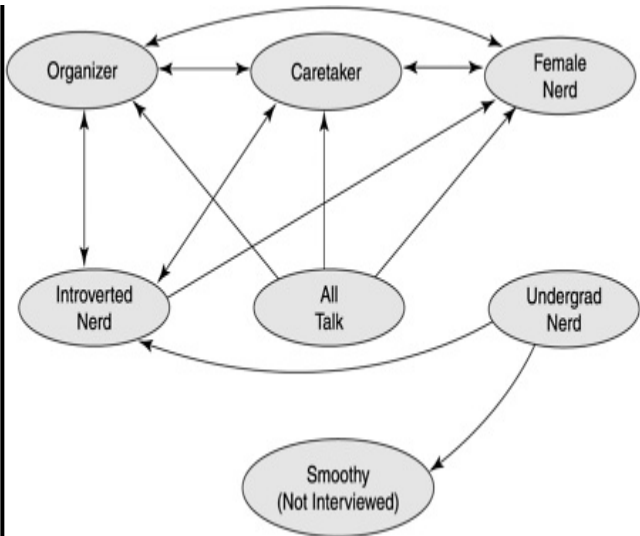
The Sociogram

A sociogram was made of the team which reveals who liked to work with whom. Each person is asked "Who are the three team members you most liked to work with?" A diagram is made from the answers. Choices are indicated with an arrow. From the diagram you can identify if there are isolates (who are chosen by no one), stars (chosen by most members), and subgroups (with reciprocal choices).

The findings of the sociogram are an indication that the qualitative comments during the interviews are consistent. The

sociogram replicates what people expressed about each other in the interviews. The sociogram appears below.

The team has three isolates and one subgroup of four. One isolate was not interviewed so his choices were not known. Pseudonyms were given team members based primarily on the role they played in the group. All Talk, Undergrad Nerd, and Smoothy were the three isolates, all male. The four in the subgroup were Caretaker, Organizer, Female Nerd, and Introverted Nerd.



When the interviews are examined, the perceptions and information from the four members of the subgroup are more likely to be similar to each other than are the perceptions and information from the

isolates. Most probably, the subgroup members discussed various issues among themselves, coming to some informal consensus on the way they perceived the situation. One or more isolates were likely to have quite different interpretations of events or their meaning (such as who were the leaders).

Conflict and the Too Nice Syndrome

According to Tuckman's five stages of group development, conflict occurs as the second stage, after the orientation phase, in ordinary groups. In my experience with undergraduate groups in Sociology 305, Sociology of Small Groups, they are very likely to skip the conflict stage as a second stage. If they go through that stage in any noticeable way or admit to going through it, it is usually right at the end, when they are performing with looming deadlines to complete their projects. Often then the conflict is ugly and contentious, with name

calling and hurt feelings.

Team A appeared to experience some conflict almost from the beginning, but it was not dealt with up front and honestly or strongly confronted until the last week or two of class. Part of this seems to be due to what I will call the Too Nice Syndrome.

Too Nice Syndrome

The Too Nice Syndrome (hereafter TooNice) I have observed in my small groups classes year after year. People are so concerned about "not hurting someone's feelings." They are "so nice" and only indirect in negatively sanctioning people who do not do their part. In the process of being TooNice, they endure extensive anxiety, anguish, and overwork all in the name of not hurting someone's feelings. Instead of being firm while respectful by holding people to the agreed

norms and performance/attendance standards as they go along, they avoid any direct discussion or confrontation of conflict. Sometimes it explodes at the end erupts into ugly and angry verbal conflict, which results in hurt feelings and negative consequences for the group as a whole.

In Team A the three isolates had not been doing their part when the situation became critical more than a week before the deadline. Part of the group grade depended on everyone completing their individual computer tasks assigned during the first five weeks. The leaders phoned Brad, the instructor, about what were their rights . . . could they kick people out of the group. Brad apparently suggested they e-mail the offending parties, warning them that if they failed to complete their tasks and failed to show up for the mandatory Friday meeting, they would be kicked out. The Organizer also posted this message on the Discussion Tool, Monday Oct. 25.

On Friday and again on Saturday the three isolates showed up at one time or another. The Undergrad Nerd appeared for an hour or less on Friday, making an appearance so that the TooNice subgroup thought that they could not terminate him even though they thought he was obeying "the letter but not the spirit of the law."

An apparently nasty and very upsetting verbal conflict occurred Friday and Saturday between most of the subgroup and All Talk during the f2f meetings and over the phone. The versions of what happened differ considerably from the subgroup and from All Talk. All Talk thought that the quality of the digital product was poor and could quite easily be remedied; he thought the group had plenty of time to fix the product and post it to Brad. Undergrad Nerd agreed with this assessment and was willing to help do the programming job to remedy the product, which would take only an hour, according

to him. The subgroup who had worked so hard to finish the product and with so much frustration because the three isolates had dropped out at the crucial time were determined to hold firm to the deadline of Friday. Some interpreted All Talk's conversation to be discrediting the work of the subgroup members, which made them very angry. They did not want to change the group's deadline and held firm. The Organizer and other subgroup members were supportive of each other in being tough against All Talk, repeatedly saying no, they were not changing the product or slipping the deadline.

The subgroup members appeared to be left from these encounters with actual fear of All Talk because of his seeming irrationality and perse-vergence of trying to change the product at the last minute. All Talk had the job of making the Team Home Page, but the subgroup no longer trusted him to do his work by the last

week and they made a dummy copy of the team home page. Female Nerd stayed up all night Monday night before the Tuesday deadline to complete and post it, missing work the next day due to exhaustion. The distrust of All Talk was massive after the ugly conflict. Some of the subgroup actually regard him as violent and threatening to their personal safety. All Talk did make a Team Home Page, but it was ignored by the subgroup.

Lack of Commitment

In the interviews the subgroup and All Talk alike attributed much of the team's poor functioning to a lack of commitment among the members. Each had different people in mind. The three isolates did not complete their commitments in a timely fashion, although all three did by the last week, after strong negative sanctioning. The team had not communicated adequately in the beginning or throughout

with everyone to know what was each individual's situation. Caretaker apparently telephoned and e-mailed Smoothy and Undergraduate Nerd regularly to keep them informed of the team's progress but she seemed unaware that Undergraduate Nerd had been sick with Hepatitis A, which was described in his biography.

Would the situation have been less stressful for the subgroup if they had not expected consistent attendance (showing up) and effort from everyone? If disappearing members had communicated up-front that "I will be unavailable to do my share the next two weeks," or the equivalent, would that have eased the situation? Was it lack of commitment or inability to function consistently throughout combined with poor communication skills and not notifying the team that produced the accusation of "lack of commitment"?

Awareness of Group Dynamics

At least one member of Team A was very aware of communication problems, leadership problems, and the problem personality All Talk by halfway or so through the semester. She spoke privately to me in class and over e-mail, concerned about her group. In the interviews, other team members did not reveal any explicit awareness of problems in group dynamics on their team.

Team B

Team B was slow to get started, with several key members describing the team as "laid back." After three weeks few messages had been posted on the Discussion Tool, and these messages consisted of people reporting that they just got their computer set up or a seventh person in the team dropped the course. Apparently after a month or so of

"laid back" inaction, one member proposed a f2f meeting at the university at which a handful showed up. The organizer had recent surgery and was not too mobile; he suggested meeting at his house which was near the university and convenient to everyone. At the second meeting, all six showed up for the first and last time. The team met probably 8-10 times f2f and used the Discussion Tool very little. All members appeared willing to contribute their share in the beginning. The Technical Leader was slow in the beginning to contribute and had to be firmly told that his contribution was necessary. The two that became the dropouts appeared to be willing to participate, but in the performing stage toward the end of the class neither contributed. On the last available evening before the deadline, with their group grade threatened due to the lack of contribution of two people, a mandatory meeting was called and the decision was made to drop

both members from the group. One, referred to as Overwhelmed, agreed to voluntarily withdraw. The second one, Unavailable, no one knows her reaction to this. She claims that she was barely informed of the existence of the mandatory meeting and thinks she should have been involved in deciding whether or not and when and where to hold such a meeting.

Leadership

The organizer assumed the leadership position without much discussion or consensus building, but most team members were appreciative that he assumed this role. The person labeled Unavailable was not too happy that the leadership was assumed rather than discussed and mutually agreed upon, but she never said anything to anyone. Toward the end, when the intensive work on the project had to be done, the most

technically proficient, who had been a slow starter, took charge technically and provided leadership in the technical aspects of the project and building the Team Home Page. Two leaders thus emerged during the course of the semester . . . the Organizer and the Technical Leader.

Norms and Communication

Were norms established of what communication tools to use to transmit group decisions, of the division of labor of tasks, of expectations about attending meetings and contributing, and so forth? Team members disagreed about whether or not norms had been agreed upon. Some said yes, we agreed upon what we were going to do, but few followed the norms. Others thought no clear expectations for communicating, division of labor, or participating had been established by the team. One leader

sarcastically said, yes, we agreed on norms such as: It is okay to miss meetings? It is okay not to communicate with anyone in the group for weeks?

The Sociogram

A sociogram was made of the team that reveals who liked to work with whom using the same procedure described in the section on Team A. Team A also had a subgroup of four people, the two leaders and the Procrastinator (who eventually did his work), and Did What Told, who faithfully did what he was told but not any more than that. The two members who were dropped from the team are isolates who were not chosen by anyone (a couple of people said they really did not know Unavailable as she had been around so little). However, a couple of people in the subgroup indicated that they personally like Overwhelmed and found him agreeable at meetings but he just did

not deliver at the end.

As with Team A, when the interviews were examined, the perceptions and information from the four subgroup members were more similar and consistent with each other than with the two isolates, which is an indirect way of indicating consensus.

Awareness of Group Dynamics

Two members of the group explicitly discussed what they thought were problematic with their group dynamics. Procrastinator attributed the group's problems to the equivalent of what I call the TooNice Syndrome. He was very aware of the social context of the course and how students do not easily assume an authority role over their fellow students in a class context. He thought that the consequences of poor performance are not that serious in a class group in

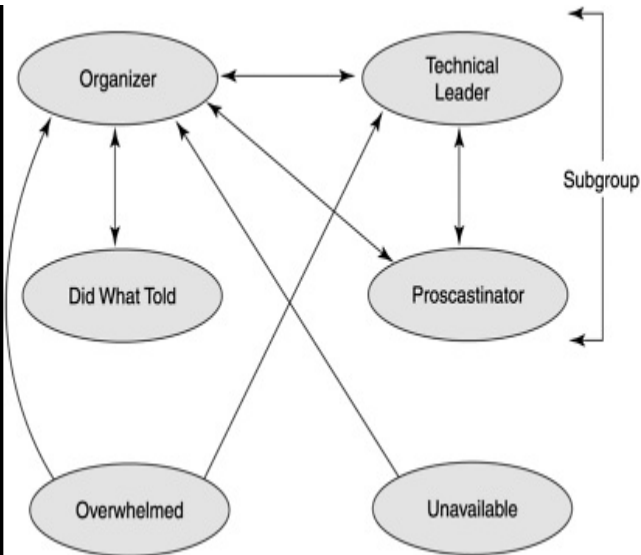
comparison with groups on the job where your paycheck and livelihood may be dependent on achieving group goals.

Unavailable thought that the group would have functioned more effectively if team building and consensus had been tried instead of Organizer rather arbitrarily assuming the leadership position the part of Organizer or arbitrarily setting the date and time of the mandatory meeting without consulting anyone. She thought that it was a failure on her part to keep quiet about these group dynamic issues and not to bring them up to the team as a whole.

Conflict and the Too Nice Syndrome

Conflict appears to be defined by Team B members as expressed hostility, anger, or fighting. When asked about conflict in the group, several subgroup members claimed there was none. In the face of

nonperforming members, they jumped in and did what was necessary to get the job done without resentment or anger. Other subgroup members would describe these same people as angry and frustrated. Procrastinator talked at length about the subgroup members being too comfortable and polite and the difficulty in getting tough with nonperforming members.



Unlike Team A, which had several angry, contentious, and very upsetting verbal bouts with one member in front of the team during the last days of the project, Team B avoided active expressed conflict.

During the last class, each team made a presentation to the whole class and to the instructor. The Organizer gave the presentation for Team B. When asked if they agreed with the way he described their team, several subgroup members and one isolate thought that he had been too negative about the team, that in fact the subgroup and Overwhelmed had worked well together for most of the semester and were very compatible. Most team members have had quite a bit of experience working in groups both in school and at work.

Payoffs to Individuals

Although two of six members were dropped from the team at the last possible minute, the subgroup members seemed to have been a little frustrated but not very upset with the turn of events. The Technical Leader thinks that the product was not as high quality as it could

have been if the noncontributors were known about earlier and the others had more time to perfect the product. The Procrastinator thought the product's quality suffered at the end. Unlike Team A, members were not left with some very negative feelings as a result of the conflict at the end of the course. Several Team B members did more than their share of work but regarded that as okay and similar to what they have to do in work groups.

The subgroup members and even Overwhelmed expressed receiving a lot and learning a lot from the course. When asked how they would rank themselves now in terms of computer experience, several explicitly talked about increased Internet literacy, but not more knowledge of programming. They ranked themselves higher than at the beginning of the course by 1.5 to 3 rankings (that is, from 3 to 4.5 or from 3 to 6 on a 0–9 scale).

Conclusion

Several items I want to highlight:

- The course requirements are perceived to be extremely demanding in terms of time and difficulty by a number of team members. At least one or more members dropped out because the time and difficulty of weekly tasks, project tasks, and their individual tasks were overwhelming to them.
- Multiple factors "caused" the poor functioning of these groups in my opinion. In Team A, the dysfunctions were not solely the result of one problem person, All Talk, although he was a challenge to anyone/everyone.
- People made assumptions that I

think were unwarranted: If something is posted on the Discussion Tool that it was (a) read by everyone, and (b) accepted by them unless they specifically protested. If a general warning about failure to attend/perform your work is posted on the Discussion Tool, then the people for whom it is intended will (a) read it and (b) take it seriously as applying to them.

- The teams probably need more structure in the beginning in order to help them identify people who are not carrying their weight so that they can sanction them. A deadline, perhaps 2/3 of the way through the course, for when the 5 individual tasks have to be completed could be useful so that the team would know who was and who was not participating.

- Teams should be required to do a "contract" that is developed, agreed upon, and signed by all persons as binding about one third of the way through the course. A deadline should accompany the contract: perhaps give them about 2 weeks to negotiate it and achieve consensus. The "contract" should specify their norms and organizational plan, and division of labor expectations about attendance and participation, expectations for people who travel a lot or have periods of intensive work/family obligations, and negative sanctions for nonperformance, including conditions under which members are terminated.
- Conflict can be a serious problem in these groups; perhaps some specialized help in conflict recognition and resolution might be sought and

taught to all the groups.

- A consultant who is not an authority could be made available to the group for help with problems of group dysfunction in order to catch some problems earlier. Team members hesitated to discuss their problems with the instructor Brad Cox in order not to "look bad" to the person evaluating them. I, as informal co-teacher with no legitimate authority, was a more neutral person with whom they could discuss their problematic group dynamics.

[*] Thomasina Borkman,
virtualschool.edu/98c/soci305/soci3051
December 17, 1996, Taming the
Electronic Frontier, George Mason
University Distributed Learning

9.2.3 Answers

Describe three techniques you would use to keep the project flowing through the virtual school.

a)

*There are several ways to keep e
realistic that every project is goin
can disappear, clients can becom*

project can make it feel like it nev

*However, by promoting team mo
be supportive of each other, thes*

Answer:

*Everyone has heard about team b
play laser tag, or go whitewater r
direct approach and send employ*

*Project kick-off parties, celebratio
building in bonuses for team men
on schedule, and an atmosphere
team enthusiasm. The daily atm
difference to me, both as a team*

Lab 9.2 Self-Review Questions

A project manager should be aware of

any and all conflicts within the team

1)

1. _____ True

- _____ False

Conflicts within the team always slow down the process of building a Web site.

2)

1. _____ True

- _____ False

Chapter 9: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

Describe the impact a dysfunctional

project team might have on project.

- 1)** Comment on communication and production issues. How might you troubleshoot these issues if you were project manager?

- 2)** Which process do you find most comfortable for you (writing, artistic, marketing, and technical) and which most difficult? How do you think this could impact on your role as a project manager?

Chapter 10. Project Bids, Contracts, and Specifications



"You never know anyone's true character until it comes time to for that individual to part with a dollar bill."

Anonymous

Chapter Objectives

In this chapter, you will learn about

- ✓ [Project Bids](#)
- ✓ [Contracts](#)
- ✓ [Project Specifications](#)

Sometimes, the game is over before it even starts.

I can think of several projects that my firm ended up completing at a loss because I bid the project badly. Luckily, I'm the owner. But, if I was

working for someone else, under these conditions, I could see my tenure as their project manager coming to an abrupt close. Of course, I've also heard it said that it's better for the owner not to be bidding on projects, that the owner is too close to the outcome. However, since many web firms begin as one single developer pounding out code from a home PC, I can not see how this situation can be avoided.

My feel for bidding projects comes strictly from experience. Honestly, I used to abhor the

process. It made me so anxious because I wanted to close the deal and get the work. Now, I can truly say that I find this process one of the most enjoyable tasks that I have. I love going into new companies and meeting new people. It's great to have the luxury to size up the project and say, "Yes, we'll pursue it," or "No, it doesn't look like a good fit," based on whether I feel that we can adequately meet the client expectations while remaining profitable.

Now, there are some projects

that we decide to take on and strictly cover costs because of their portfolio value and non-profit status. This was the case with Battleship cove.com. We took this project on because frankly, I really wanted to do it. I had a family connection to it. My grandfather and uncle had worked on the Battleship Massachusetts, which is now berthed in Battleship Cove, along with the Joseph P. Kennedy II, the Lionfish, and the Russian ship, the Hiddensee. My father, as a young boy, had seen the

Battleship launched from the Quincy Shipyard in 1937. Given that my parents were themselves raised in Quincy and in turn, raised my brothers and I there, I felt a strong connection with Quincy shipbuilding history. This was a client, albeit a very unusual one, which I already knew well and was intrigued to learn more.

After we contracted with Battleship Cove, I roamed all over the "Big Mamie" with my sons and nephew and realized that this was the fourth

generation of Morses (Morse being my maiden name) to appreciate the old girl, and the third generation to do work for her. I was truly excited about bringing the Battleship Massachusetts and her sister ships into cyberspace with the functionality I knew our firm could provide. Not only was the project high profile, but the people down at Battleship Cove in Fall River, Massachusetts, were wonderful to deal with, making it easy to commit to their project.

Once in a while, a Web firm can

do a Web site for portfolio value and strategically, for the long term, it turns out to be an excellent choice. Me, I was just really honored and thrilled to do Battleshipcove.com.

The Internet itself has often been described as a new frontier or, "The Wild West," strictly because of its unregulated nature. Developing on the Web brings its own set of issues. Picture your grandparents watching television for the first time. Something objectionable is shown, and they feel damaged.

Who would they feel is responsible? Perhaps it was the network or the television station? Maybe it was the actors? Maybe it's the guy who sold them the television? They don't know. It's a new medium.

So, now, picture the scenario where someone reads something objectionable on a Web site. They feel that it is damaging to them personally and decide to pursue litigation. Who do they name in the lawsuit? If the litigating party does not know the Web terribly well, there's a good chance the

party will name the company who owns the Web site, the Web firm that designed it, and any other entity attached to it perhaps the hosting company.

Is my Web firm responsible for something that a client company chose to put on its Web site? No, I'm not. But, does the litigating party know this? In the time it takes for me to explain this to them in a courtroom setting, I can be out attorney's fees and days of work. I need to have a contract that will stand up in court,

which will not only protect my client, but most importantly, will protect me. My contract must stipulate that I will be held harmless should my client come under prosecution and that my client agrees to defend me.

This is only one example of why contracts are crucial and why it's important for a Web firm to invest in one and **use** it. In this chapter, we'll explore many other applications of such a contract.

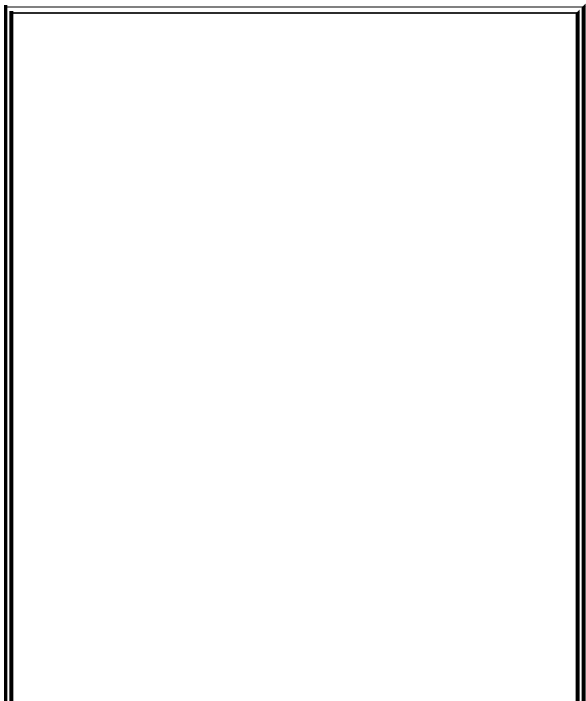
Project specifications are an

agreement between the client and the Web firm as to how and when the project will be built. This sounds similar to a project proposal. However, a proposal is a short document detailing the scope of work. A project spec is also known as the "project bible." The specification is going to be fully executed by all participating contractors and subs and needs to be as detailed as possible, as this is the tool that keeps clients from asking for work that they are not entitled to under the contract. The

specification is written directly after work orders and contracts are signed. The client has a chance to review the specification, and all parties must sign it. Very few Web firms have the resources to write project specifications unless they are already under contract. Therefore, this is just another check and balance along the line to keep the road clear for production.

In this chapter, you will read several project specifications and analyze their significance.

Lab 10.1: Project Bids



Lab Objectives

After this lab, you will be able to

- [Qualify the Client](#)
- [Create a Client Questionnaire](#)
- [Determine a Client's Organization](#)
- [Write a Project Proposal](#)
- Understand Various Types of Bids

After a Web firm has built up a decent reputation and a good

portfolio of sites to show potential clients, the number of inquiries regarding work can grow exponentially. As the owner of a Web firm and its primary project manager, I spend just as much time sorting out which projects I feel my company should go forward with and responding to inquiries as I do participating in the building of the sites.

Doing my homework up front can save my company as much money as possible in the following ways:

- I weed out potential clients who are not prepared to follow through with contracting with us but are using us as "free consultants" for their projects. These types of situations can waste a great deal of the firm's time.
- I determine the project requirements as closely as possible. Down the line, poor communication can lead to lost billable working hours ones that

programmers, graphic designers, and editors need to be compensated for by the firm, but the client will not be responsible for and should not be.

- I feel out the client in their environment. This allows me to evaluate their organization level and how their team operates. If the client seems disorganized, they will ultimately require more time and hand holding by the Web firm. I don't necessarily have a

problem with this, but when I'm determining how much I'm going to bid for doing a Web site, I will add a "fudge factor," which always ends up covering the extra hours it takes to manage this type of client.

- I evaluate whether this client is comfortable with making a commitment to the Web site by requiring a substantial amount of money up front. Unfortunately, the days when business can be done

on a handshake are gone. I don't let the discussions go on for too long before I come up with a bid for the project and require money to continue discussing it. I've noticed that potential clients do not make a psychological commitment to these types of projects until a check is written and yet, they will take hours of a firm's time discussing it and may go somewhere else in the end. My job is to ask people to "put their money where

their mouth is" and decide when the appropriate time is to do so.

- Based on all of these factors client organization, project requirements, and client commitment I make the decision as to whether I will flat bid a project or charge an hourly rate. Flat bidding commits me to the project from start to finish. An hourly rate gives more flexibility and a better opportunity to exit from the project should things not be

going well.

- When all is said and done, I look at the viability of the project. I have to feel that this venture could be a successful Web application before my firm gets involved. Regardless of the money involved, I feel that ethically I cannot participate in building a project that is ill fated from the start. The client will be unhappy and my firm's reputation could suffer. In the long run, taking on this

sort of project is more costly to the Web firm.

Bidding projects is something that grows much easier with experience. One gets used to sizing up clients, requirements, and internal Web firm situations that make a certain project easier to handle than another. You should know how much your graphic designer, programmers, and support staff costs per hour. Also, don't forget the firm itself. Every firm must make so much an hour to support rent, telephone costs,

equipment costs, advertising costs, and administrative costs. Software costs money, as well as the paper that goes in the copier. The project manager needs to be aware of what the firm itself costs per hour to operate. This is all determined by overhead.

My firm has operated out of my home for several years. Eventually, this may need to change, and growth is requiring us to look harder at that decision. However, I have always felt that this was an incredible plus because I could

offer highly competitive bids and remain very profitable because of our lack of overhead. Most of the highly talented people working for me can work remotely at their homes, although they are all local and available for staff meetings and project meetings. It has been the best of all worlds to work with talented and motivated professionals who can produce excellent work out of their home offices. I do not need to ask clients to pay for my marble office foyer. In a sense, during the life of

my company, clients have only had to pay for labor costs incurred on their own Web site, my own personal equipment, and one administrative person who comes in, pays bills, files, does errands, and facilitates customer service a few days a week.

However, there are many successful Web firm models that remain profitable and operate within an office environment to facilitate more projects at one time. A firm like this may also be able to bid highly competitively because of

the sheer volume of work that is being done. An experienced staff reacting directly after a client's phone call is able to cut down on the unnecessary costs for the firm, which can be found particularly in design work when a graphic designer is going in one direction and needs to stop because the client wants something else. This is a commonplace scenario, and no matter how good a project manager is, there will always be a certain amount of effort duplication that can't be controlled.

So, keeping in mind the firm's hourly overhead, the project manager must consider that the firm's graphic designer costs \$30/hour. The hardcore programmer, who does the databases and scripts that enable e-commerce functionality, costs \$50/hour. The HTML intern may cost \$10 an hour. However, someone who costs \$30/hour, be it a senior HTML writer or the project manager, is going to need to review the intern's work before it goes out. When the project manager evaluates

the project requirements and compares them to other similar projects, he or she roughly knows how many hours are involved and what that is going to cost the client.

Beyond covering costs and evaluating any pitfalls that will stem from a particular client-firm relationship, I always advise new Webmasters to charge enough to be respected. If the client feels they contracted you extremely cheaply, they may begin to wonder why you were so inexpensive in comparison to

everyone else, and your time isn't valued as highly by the client as it should be. Strange, but true. On the other hand, the Web firm also needs to charge fairly. If there's a new Windows NT programmer on board and management knows there's a learning curve involved, the firm bears the burden of the learning curve, not the client. Some new fledgling Web firms charge outrageous amounts for shoddy work, just because the perception is that a Web site should cost a lot of money and

they see that the client isn't necessarily Web savvy. Buyer beware! I usually end up taking care of these clients, once they realize what has happened. From my perspective, client-firm relationships are easy because all one has to do is treat the client fairly and they are appreciative of the services they have received.

Lab 10.1 Exercises

10.1.1 Qualify the

Client

A small business has called your firm about a new project for ten years and feel that it is time for a change. They want to do on the Web, except that fact is making them nervous.

What would you do to qualify this client? How long will you discuss this commitment? What kinds of requirements address any production concerns?

a)

A group of entrepreneurs, who would be venture part time at first, approach your project. You know that they would be part-time pockets. What are your concerns? What type of structure would you set up to circumvent the concerns you have identified?

b)

A large, multi-billion-dollar corporation as a body of work. This could easily tie your firm into such an arrangement? What are the k

Handwriting practice lines consisting of 10 sets of three horizontal lines (top, middle dashed, bottom).

c)

Handwriting practice lines consisting of 4 sets of three horizontal lines (top, middle dashed, bottom).

10.1.2 Create a Client Questionnaire

Compose a questionnaire for the client in

a)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Compose a questionnaire for the client in

b)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

10.1.3 Determine a

Client's Organization

An owner-operated business contacts you with the owner, a few employees make failed attempts at other types of project and has been in operation six months. We regarding the firm's ability to meet dead

a)

A large corporation contacts you regarding many people on the project team with commitment motivated to move forward on the project requiring all of the subsidiaries to be on-line and the fact that they are interviewing someone in working with this group?

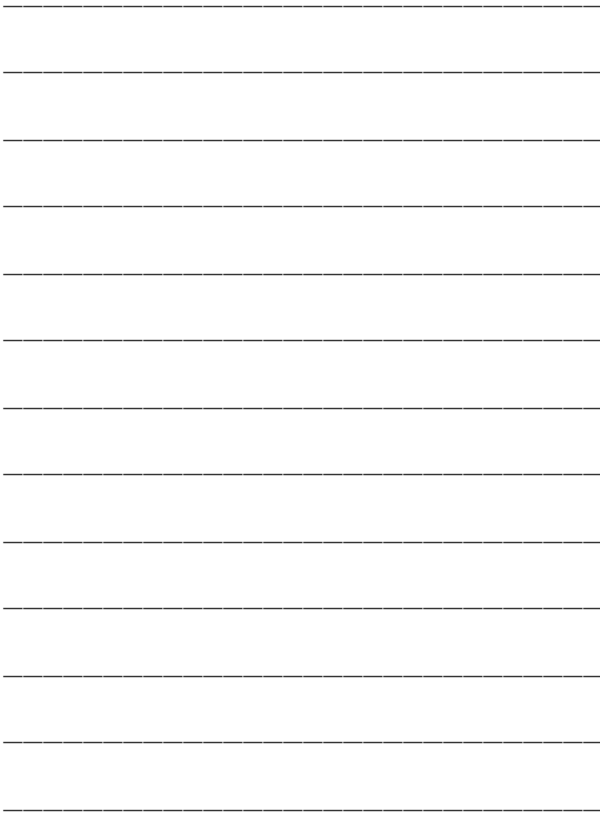
b)

10.1.4 Write a Project Profile

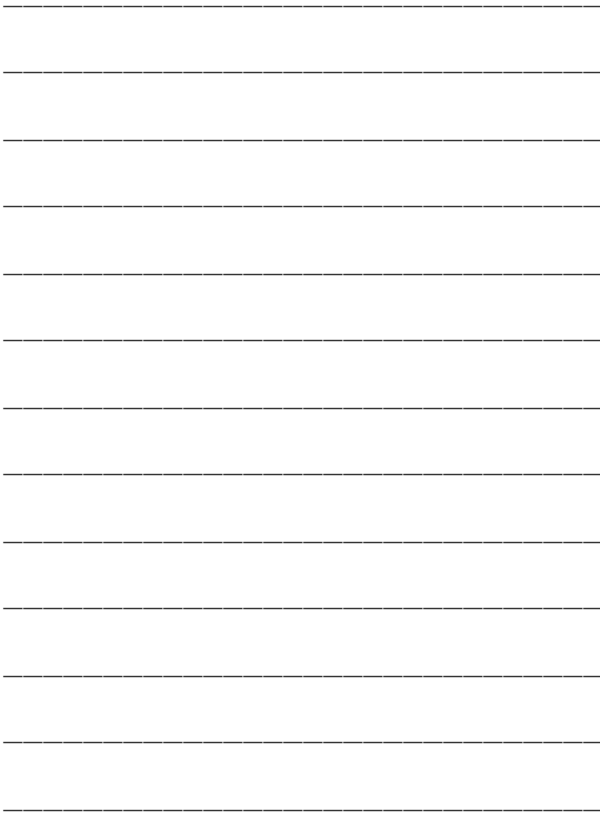
Say you've decided to move forward with a project. You would like to document your discussion of project functionality, deadlines, site graphical and other requirements that the potential client may have. How could this document serve?

a)

For the project mentioned in [Lab 10.1.4](#)
You may create your own set of require
plan.



b)



10.1.5 Determine a Flat versus Time/Materials Bid

Admittedly, 90% of new Web site builds manager determines the total project cost (the schedule of deliverables), and most

this. However, can you think of a scenario
for Web development based on an hour?

a)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

If you are unsure of some of the project wants to get moving right away, what a

available to you in bidding the project?

b)

Lab 10.1 Exercise Answers

This section gives you some suggested answers to the questions in [Lab 10.1](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located

at

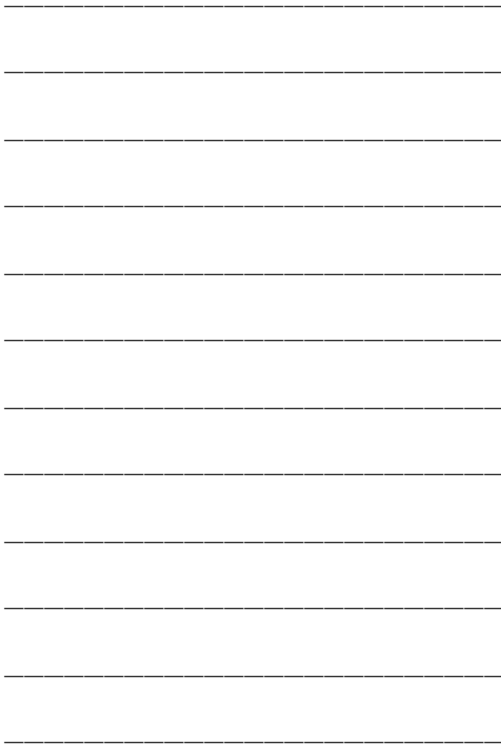
<http://www.phptr.com/phptrinte>

10.1.1 Answers

A small business has called your firm for ten years and feel that it is time what they want to do on the Web that fact is making them nervous

What would you do to qualify this company? How long will you discuss commitment? What kinds of requirements address any production concerns?

a)



My first concern is that this in fact their mind regarding whether they specific. It could be that the owner URL painted on it, and this is now client is calling to pick my brain for school kid build the site. They may professional presence may really

I start off by citing a few case studies well on the Web and assess the client's generic questionnaire to help them suggest that they fill it out, and call have any questions. If the client is from there to when I would be available the appointment, however, I do not that if we come out, we're expecting contract with us, not to build right schedule. This puts structure into potential client knows that we won't meeting. We encourage potential meeting. Thus, when a price is quoted already set.

Before I meet with this potential

Answer: *homework, know my firm, know c
down and meet, there should be i
the "We'll get back to you" scena
deposit check can't be cut immed
wasted my time. Deposit checks
at these meetings, if there isn't s
research for them or do other kin
considering us for their Web site.
what they really need is consultin
them of our rate for that type of*

*The point is, the only thing that I
with its time. But I can't allow my
prospecting with companies that
getting free consultative work unc
Most of the time, people don't ev
conscious agenda item with them
packing. It's just that they're not
and the savvy project manager k*

*Even if we decide to move forward
check, and a commitment to get
Also, the bid that is given reflects
necessary to facilitate the project*

A group of entrepreneurs, who will be part time at first, approach you with a project. You know that they would need some pockets. What are your concerns? What type of structure would you set up? What have you identified?

b)

A large, multi-billion-dollar corporate body of work. This could easily tie of such an arrangement? What are

c)

This is a prospect that can set me up. If the project goes well, for six months, the firm can work on the project as opposed to prospecting. The firm can be kept to a minimum during this time.

However, I've also known these small companies often work on a P.O. system and are fast about paying. I know of a scenario where a company never paid during that time. Finally, the firm paid the amount originally owed.

Pitfalls can include the following:

- *The expectation that payment will be made as requested on the development of the project.*
- *The Web firm being stuck in management issues.*

Answer:

- *The working relationship between the firm and the client deteriorate. Six months is a long time in a difficult situation.*

Benefits can include

- *Less nonbillable hours for the firm*
- *A successful project for a large company in a different category when bidding record puts the Web firm at a disadvantage*
- *If this is a good client relationship, the client will be contacted again and the site could work into a good business*

10.1.2 Answers

Compose a questionnaire for the

a)

*I would be interested in having ar
10.1.2 for all three clients. Howe*

be interested in for each client.

With this client, I'm assessing the following through, so I am particular questions:

- *What is your mission statement?*
- *Who would you want to reach?*
- *Describe your industry. Do you have a niche?*

Answer:

- *What are your company's primary goals?*
- *By which measurements and metrics will you know your Web site to be successful?*
- *What is your Web site budget?*
- *What kind of functionality should it have?*

- *Are there resources within the organization to support the demand for and supply approvals?*
- *What is your experience with the current market conditions?*

Compose a questionnaire for the

b)

With this client, I'm assessing the commitment to it, so I am particular questions:

- *What is your mission statement?*
- *What other marketing efforts are you doing?*
- *When do you need to break even?*
- *What is your Web site budget?*
- *What other kinds of plans are you considering, and how are you in adopting them?*

Answer:

Compose a questionnaire for the

Handwriting practice lines consisting of 10 sets of three horizontal lines (top, middle dashed, bottom).

c)

Handwriting practice lines consisting of 3 sets of three horizontal lines (top, middle dashed, bottom).

*With this client, I'm assessing the
working with and if we can work v*

- *What is the mission statement*

- *Who on the project team will*
- *What are the long-term plan*

Answer:

- *What is our exit plan should*
- *How often will the firm be p*
- *Can we set up a schedule of*
- *How will the approval proces*

10.1.3 Answers

An owner-operated business cont

with the owner, a few employees
fated attempts at other types of
and has been in operation six mo
regarding the firm's ability to mee

a)



Obviously, this firm is in a state of chaos. They are not getting deliverables from them and obtaining them is a major fault. It's just the nature of a startup. The foundation is being built. There is no hierarchy within the company. They are trying to pay their creditors.

Answer: *trying to pay their creditors.*

I would have no problem getting a person who has finished the project. I should pick one person who has finished the project and stick to the deadlines or go to the person with final approval would I build to make decisions.

A large corporation contacts you and you have many people on the project team. You are motivated to move forward on the project and requiring all of the subsidiaries to be involved and the fact that they are interviewing people in working with this group?

b)

This is a recipe for failure, unless strongly in a team approach, where everyone can benefit a project. One person has

I find that client teams tend to struggle with too many cooks in the kitchen. Decisions with too many different opinions, where only one person makes the final decision, can work well. Otherwi

Answer:

moves very slowly.

*I would bid high for this reason, k
client is interviewing several firm.
like to know if my firm is being in
my Web firm's work and has seen
an internal quota of project bids k
have a great deal to do with the e
presentation.*

10.1.4 Answers

Say you've decided to move forward.
You would like to document your
functionality, deadlines, site graph
requirements that the potential cl
could this document serve?

a)

[illegible]

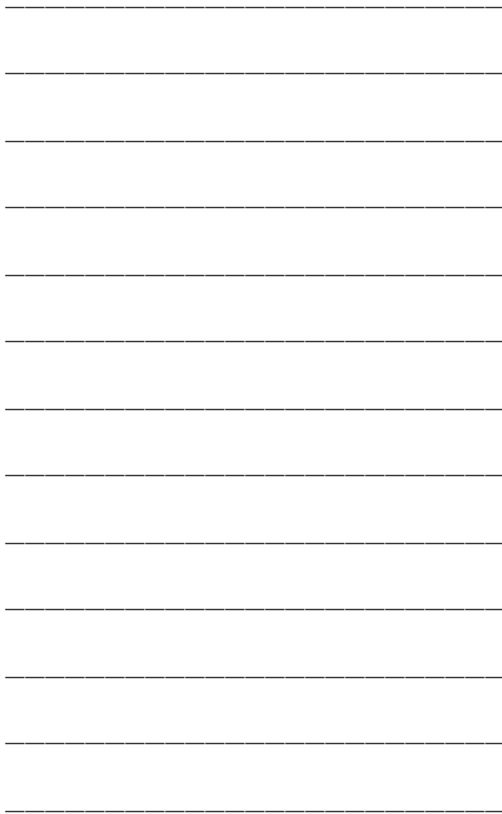
*If the project is complex, it's always
outline to be signed by the client*

contracting. This way, the client is covered under the work order and inaccruracies. It's much easier to phase and find that the client is e the initial agreement. The firm w renegotiating everything after mc

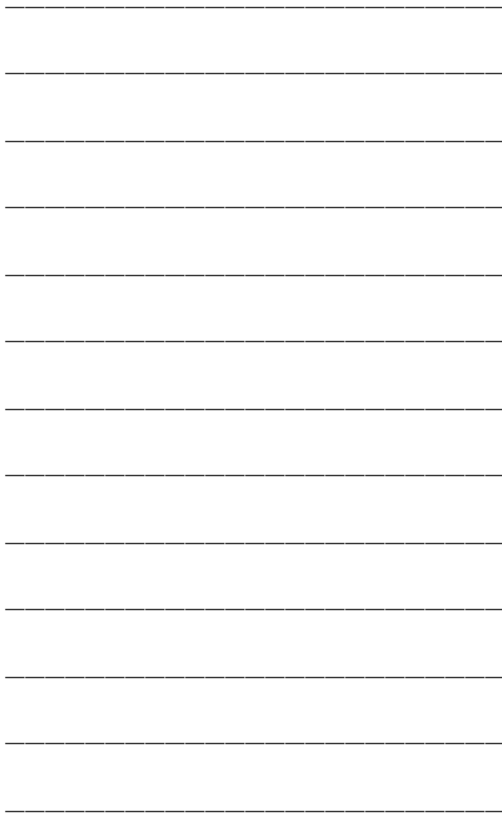
Answer: the relationship between the firm project immeasurably.

In a sense, the project manager i agreement between two parties. . situation for both the Web firm a project, which satisfies the client happy, there will be repeat and re deal riding on the clarity with whi

For the project mentioned in [Lab](#) You may create your own set of plan.



b)



*This is a project profile for ABC pa
Anytown, USA 00000.*

*ABC partners has contacted DEF I
company that encompasses the f*

- *Custom graphics high-end
feel of the site. The client a
inform us of any particular r
Partners already have a rou
DEF to storyboard this conce
work.*

The client will be presented

by the graphic artist. ABC Pa
artist from these composite
Web site.

Answer:

- *Eight static HTML pages tha
company, its services, and c
compile this information inte
date.*
- *One searchable database, w
present to users. Client agre
required in the database bef*
- *Upload to server and registr*

Total cost: \$4000 \$4500

Estimated Delivery Date: 2 4 we

10.1.5 Answers

Admittedly, 90% of new Web site manager determines the total price (the schedule of deliverables), and this. However, can you think of a bid Web development based on a

a)

In the scenario described in [Lab 1](#) an hourly rate. It's obvious that t toward developing the site. The l most likely isn't the possibility of only asking to be paid for the hou Chances are that, given this situa indians), decisions are going to be to redo work already completed.

Answer: *If there is a pleasant surprise, an effectively, then it will reap the b should this not be the case, the fi firm.*

I often work at a flat hourly fee o clients. By then, a trusting relatio record of payment and delivery a not overcharge, and I trust that v

If you are unsure of some of the wants to get moving right away, I available to you in bidding the pro

b)

- *Bid a combination of a flat fee defined and an hourly fee for analyzed.*
- *Bid a range. If the impact on the Web firm can bid between this anyway. That way, if the conscious of defining things price.*
- *Bid the project in phases. If the client can get ready to n*

Answer:

Vice versa, bid the program regarding the graphical pres of these phases is complete phase of the previously und

Lab 10.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) Which project(s) seems fairly safe to flat bid?

- 1. _____ Potential client presents highly defined**

specifications, although the business is a start-up and seems a bit disorganized

1) ● _____ Established business is a little vague on its Web site requirements but is having consulting work done ahead of time to firm up the details.

● _____ Large corporate entity has put together a project team with an unspecific chain of command to work with an outside Web firm to build a Web site.

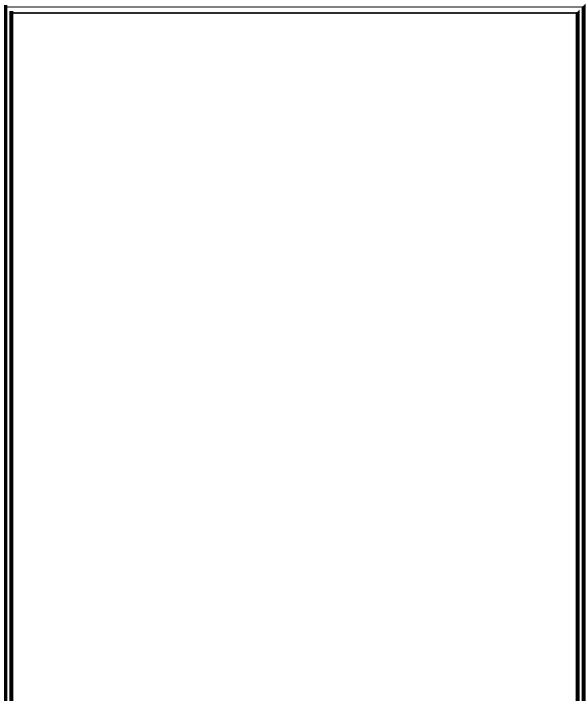
(True/False) When bidding a project, a project manager is like a

2) 1. _____ **Real estate broker**

● _____ Internet consultant

- _____ Lawyer

Lab 10.2: Contracts



Lab Objectives

After this lab, you will be able to

- [Identify Possible Project Pitfalls](#)
- [Create a Work Order](#)
- [Evaluate a Sample Contract](#)

In a capitalist society, most of us are firmly attached to our possessions. The prospect of losing one's home and/or savings in a dispute with a client can be extremely daunting. Most likely, if you

work for someone else, you are insulated against this type of litigation, which might threaten your personal assets. However, as a self-employed contractor, you have to take steps to protect yourself, one of which is the regular use of a programming services agreement or contract.

This lab is not meant to replace a well-timed visit to a lawyer who specializes in contract law and understands the Internet. Rather, it explains how the contract fits into the project management process. If used

correctly, a contract is yet another tool that protects not only the Web firm but the client as well. It further defines the relationship and what is expected, given several project outcomes. All avenues should be explored, even the one that no one likes thinking about while enthusiastic about a project kick-off: the possibility that one or both parties wants to terminate the agreement.

Contracts should be reviewed regularly and updated to reflect changes in the industry. In the coming years, the U.S.

government will be looking much harder at Internet law. Newt Gingrich, Former Speaker of the House, speaking at a recent Internet Commerce Expo in Boston, said that the challenge with effectively regulating the Web is that Web entrepreneurs are extremely busy. The Web is literally exploding around them, and keeping up with industry and technical advances is more than a full-time job. These entrepreneurs may not yet understand how crucial it is to educate government officials

with regard to effective implementation of Internet law. It's the common debacle where those that are talking aren't necessarily in the know, and those that are in the know are too busy to talk. However, the way this law is eventually handed down will affect everyone in the industry.

Intellectual property and copyright are other considerations for the client. Often, the client will ask the Web firm questions with regard to these issues. What kind of liability might the Web firm

assume if it inadvertently consults on these issues? The Web firm is not a law firm. It's always better to refer the client to a lawyer when questions such as these arise or punctuate a response with, "We're not lawyers, so you'll need to consult one. This is only our understanding of the issue."

Contracts help to define what the Web firm is and is not responsible for. They identify liability in case the client is sued and the Web firm is also named in that lawsuit. Also,

contracts define terms of use. The source code written by the Web firm is reserved for the client's use; if it is resold to another entity without the Web firm's permission, the Web firm could be due restitution. Therefore, the terms of use or licensing of the source code must be clarified within the contract.

Lab 10.2 Exercises

10.2.1 Identify

Project Pitfalls

A company that specializes in adult entertainment has hired your firm to build a Web site that would display nude photographs. Regardless of how you feel about free speech, if your firm is considering the project, what questions should you pose to legal counsel regarding

a)

Several entrepreneurs plan a Web site that provides brokerage services. What questions would you ask them?

b)

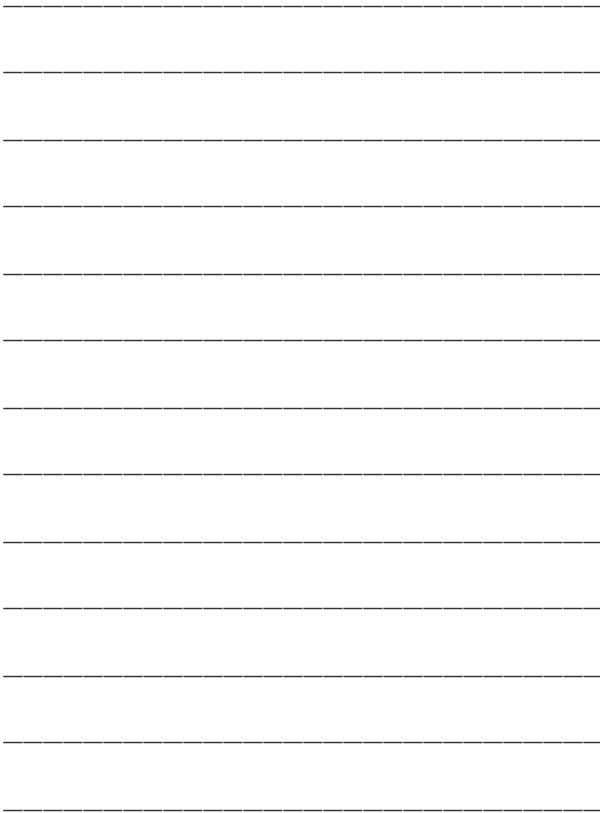
Your firm considers bidding on a site in w
What kinds of questions might you have

c)

10.2.2 Create a Work Order

A work order, similar to those used in the preliminary agreement between the client and the service provider, has been ordered by the client.

will be performed, and any disclaimers or that essentially says, "You are ordering to be billed this much." Draft a sample word in it?



How advantageous is a work order when the reservation of development time with

b)

10.2.3 Evaluate a Sample Contract

The following is a standard programming services contract between a Web firm and its

client.

This PROGRAMMING SERVICES AGREEMENT ("Agreement") is made and entered into this _____ day of _____, _____, by and between _____, with an address of ("Client"), and Acme Web Development, with an address of _____ ("Developer").

1. Definitions. For purposes of this Agreement, the following capitalized terms shall have the meaning ascribed to them below:

Code shall mean computer programming code. Unless otherwise specified, Code shall include such computer programming code in both object code and source code forms.

Confidential information shall mean Work Product and any other information that Client indicates to be confidential and Developer acquires (as a result of disclosure by Client, access to Client facilities, analysis of Client's products or enhancements, or otherwise) in connection with the Services. However, Confidential Information does not include information that rightly becomes public or that Developer independently develops or acquires without reliance on other Confidential Information produced or acquired by Developer.

Services shall mean programming and development services relating to existing and planned products and enhancements of Client or Client's customers, whether heretofore or hereafter provided by Developer.

Work Product shall mean all Code and other media, materials, or other objects produced as a result of the Services or delivered by Developer in the course of providing the Services.

2. Scope of Services; Compensation.

All Services provided by Developer shall be subject to this Agreement unless otherwise agreed upon by both parties in writing. All Services shall be performed in a workmanlike and professional manner. Services are to be described more specifically in Work Orders, which shall be set forth in writing, shall be signed by both parties and, once signed, shall be made a part of this Agreement.

The parties are and shall be independent contractors to one another, and nothing shall be deemed to cause this Agreement to create an agency, partnership, or joint venture

between the parties. Nothing in this Agreement shall be interpreted as creating or establishing an employer/employee relationship between Client and either Developer or any employee or agent of Developer.

The terms for compensation of Developer shall be agreed upon by both parties in writing in such Work Orders. Client shall be responsible for reimbursement of expenses incurred by Developer as stated in such Work Orders. On any bill (interim or final) remaining unpaid for a period of ninety (90) days, a service charge of one and one-half (1.5%) percent per month will be charged from the date the bill is rendered. This represents an annual rate of eighteen (18%) percent. In the event Client fails to pay any bill or expense reimbursement beyond ninety (90)

days, then Developer may declare the entire unpaid amount immediately due and payable ("default"). In the event of default Client agrees to pay all reasonable costs of collection, including reasonable attorneys' fees and Court costs, to the extent allowed by law.

3. Confidential Information.

Developer shall receive and hold all Confidential Information in trust and confidence for Client. Developer may not use any Confidential Information except as authorized by Client and for the benefit of Client. Developer may disclose Confidential Information only to those employees who have a "need to know" in order to help Developer perform Services and who are legally bound to maintain confidentiality of the Confidential Information. Developer shall be responsible for safekeeping of all

materials and media containing Confidential Information and shall account for such materials and media at Client's request. Upon completion or termination of all or any relevant Services, Developer shall deliver to Client or destroy (as requested by Client) all materials and media containing Confidential Information (including all copies and extracts thereof). Developer shall certify its compliance with such obligation at Client's request. These confidentiality obligations shall remain in effect until five (5) years after any relevant Services are completed or terminated and Developer has delivered to Client or destroyed materials and media containing Confidential Information associated with Services.

4. Rights in Work Product. All Work Product shall be deemed to be works

made for hire and shall belong exclusively to Client and its designees. Developer grants to Client an irrevocable, nonexclusive, worldwide, royalty-free right and license to use, execute, reproduce, display, perform, and distribute (internally and externally) copies of, and prepare derivative works based upon, such Work Product.

5. General Provisions. Developer shall not be liable to Client for any failure or delay caused by events beyond Developer's control, including, without limitation, Client's failure to furnish necessary information, sabotage, failure or delays in transportation or communication, failures or substitutions of equipment, accidents, materials, or equipment or technical failures.

Client shall defend, indemnify, and

hold harmless Developer from and against all claims, liability, losses, damages, and expenses (including attorneys' fees and court costs) arising from or in connection with the use or application of Developer's work by Client or any direct or indirect purchaser or licensee of Client.

It is assumed, and Developer strongly recommends, that any and all materials, media, or Confidential Information provided by Client to Developer in order to perform Services will be in duplicate form and not the originals. Developer shall not be liable to Client for any loss or damage to any and all such materials, media, or Confidential Information, whether in duplicate or original, that are provided to Developer from Client in order to perform Services.

This Agreement supersedes all other communications, understand-ings, and agreements relating to the subject matter hereof, and may be amended only in writing. This Agreement shall be governed by the laws of the Commonwealth of Massachusetts as they pertain to contracts executed under seal delivered and performed in that State.

IN WITNESS WHEREOF, this Agreement has been executed under seal and delivered by authorized representatives of both parties as of the date first indicated above.

Acme Web Design

.....(client)

By:..... By:.....

Title: Title:.....

In the preceding contract, which points c
apply to the Web and Web site developpr

a)

What areas do you feel are vague, given industry?

b)

Lab 10.2 Exercise Answers

This section gives you some

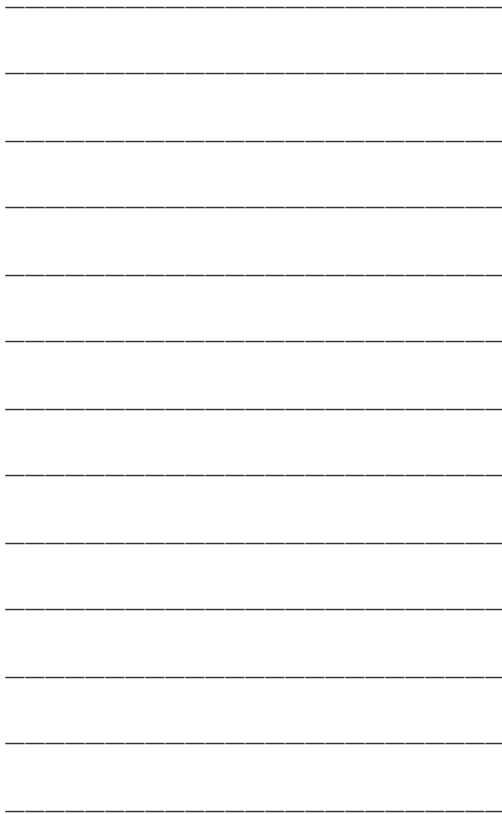
suggested answers to the questions in [Lab 10.2](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

10.2.1 Answers

A company that specializes in ad
your firm to build a Web site that
Regardless of how you feel about
your firm is considering the projec

manager pose to legal counsel re

a)



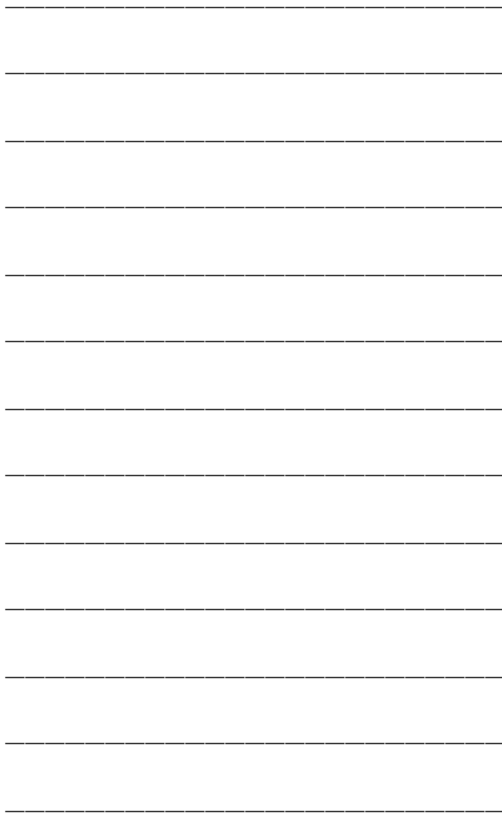
First, after begging my superior to tendering my resume elsewhere, with this site. It would be necessary lawyers:

Answer:

- *What is the current legislative How does this legislation ap*
- *Which disclaimers need to b*
- *If it is permitted to build and materials, is it possible to d protects the Web firm again*

Several entrepreneurs plan a Web brokerage services. What questio

b)



There are many Web sites owned by accountants, and stock brokers. Sites outline services offered. Sites like trading, allowing investors to day beginning to impact the stock market happens in the financial industry, to managing their own investments

However, as more people take advantage of misunderstandings and opportunities. Several questions, including the following

- *If there is a technical failure what is the liability for the V*

Answer:

- *Is there any way to insulate technical glitches?*
- *If there is a technical problem as opposed to the program fault be determined? Can an*

*(Often, it cannot be apparent
with the technology, where i*

- *Is it standard procedure to a
defense expenses, even if t*
- *How can the Web firm be in.
given on the site?*

Your firm considers bidding on a s
What kinds of questions might yo

c)

-
- *What is the current legislative*
 - *If the client questions the re technical glitch be evaluated*
 - *How can the Web firm be cc claims?*

Answer:

10.2.2 Answers

A work order, similar to those use preliminary agreement between t services have been ordered by th

will be performed, and any disclaimer that essentially says, "You are on your own. We will not be billed this much." Draft a sample in it?

a)



The following is the work order I developed internally, stating prices with a programming services contract.

	Work
Starter Package	\$
Business Package	\$
Deluxe Package	\$
Additional Page	\$

CGI/JavaScript programming \$

Guest Book \$

Auto Responder \$

Bulletin Board \$

Chat Room \$

Submit to 7 Major Search Engine

Internet Consulting \$

Web Site Maintenance \$

Writing/Editing Services

Graphic Design

Answer:

- Acme Web Design guarantees that if there is a programming issue, we will resolve it within three business days.
- Acme Web Design cannot guarantee a return on the separate business relationship.
- Acme Web Design cannot guarantee a return on the search engines, as the results are determined by the search engines.

- Acme Web Design cannot g
- Client agrees to supply Acme materials by_____

If Acme Web Design does n
date, the client understands
need to be rescheduled acc
and an updated work order

- Standard billing procedure is
when the work is ordered a
upload. Acme Web Design n
- A separate work order will b
appropriate deposit remitted
the Web site build that are r
work may require the Web :
Web Design has been contr
site between_____
will make a representative a
completed.

Acme Web Design
Representative

How advantageous is a work order
the reservation of development time

b)

I see a work order as being a transition in the relationship is now transitioning to a services completed phase, which is a work order to subtly ask the client for a new work order that company's development work

Truly, the work order serves as a we can do your project. These are "Yes, we are doing your project. I Often, if I feel an initial meeting prospective client is really serious estimate the work that has been client to focus on what is needed, there, it moves the conversation this date; we could schedule you exchange to, "Roughly, I think it's to reserve the time, we'll need a the meeting to some sort of comp but I'm not going to hamstring m brainstorming over a Web site tha and/or to build. I have also taken effect, add to the prospective clie to moving forward. It's called "clo great tool to accomplish this.

Answer:

A good work order makes the clie hopefully, the Web firm is formal time, estimated dollars, and guar is within and not within the power search engine ranking and hosting

*for search engine positioning and relationships. The Web firm can s
take responsibility for something*

*The work order provides structure
materials should be received by t
forward, and it gives the firm a s
on time. Plus, it should specify pa
expected? Will it be billed? Will it
payment be required over severa
diffuse many disagreements.*

10.2.3 Answers

In the preceding contract, which p
apply to the Web and Web site de

a)

[illegible]

The following points seem to be in the development process:

- *The definition of terms up to 1000 words (I.e. Code, Confidential Information, etc.)*
- *This contract allows for the possibility of a written amendment, thus allowing for flexibility in the agreement.*
- *The contract specifies that the client is not connected to one another and is not an arrangement.*
- *The terms of compensation are clearly defined, assessing late fees for any default, the client must pay the fee for payment and/or court fees.*

Answer:

- *A confidentiality agreement This is an assurance that information disclosed to outside parties will be kept confidential.*
- *This contract specifies clear work performed by the firm*

- *The development firm is not resulting in Web site failure,*
- *A very important clause is to defend and hold the contract outside entities as a result of*
- *Another clause indemnifies and suggests that the client make the development firm.*

What areas do you feel are vague in the industry?

b)

[illegible]

- *The agreement does not specify*

the business arrangement between the two firms determines which materials at each site are owned by which firm.

Answer:

- *The contract does not specify which firm owns which materials at each site. Events are beyond that of the independent consulting firm.*

Lab 10.2 Self-Review Questions

In order to test your progress, you should be able to answer the following questions.

Which project seems to hold the most liability for the Web firm?

1. _____ **An on-line banking Web site**

1)

- _____ A Web site which offers financial/stock advice
- _____ An on-line book store

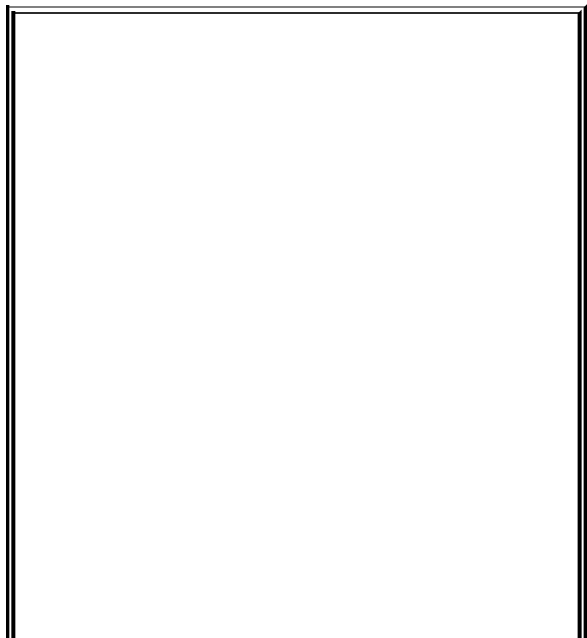
Which of the following items belongs in the initial work order?

1. _____ **Colors to be incorporated into the site**

2)

- _____ Schedule of payment
- _____ Identification of Web site hosting company

Lab 10.3: Project Specifications



Lab Objectives:

After this lab, you will be able to:

- [Establish Web Site Hierarchy](#)
- [Write a Project Description](#)
- [Identify a Project Budget and Schedule](#)

After the Web firm has been contracted to build a Web site, the best way to identify very specific content and functionality, and to allocate resources for the completion of

these tasks is to write a project specification. This specification, in effect, becomes the "Project Bible," as it is one document used to solidify agreement between the client and the contractor on Web site specifics.

The following documents should be included in the project specification:

- Web Site Hierarchy (Other names include: Flow Chart and Information Architecture)

- Detailed Project Description
- Budget and Schedule

It's much easier for the Web firm to catch differing project goals between client and contractor, while remaining profitable, by identifying them at the project specification stage than when work is completed and doesn't meet with the client's expectations.

You will also be introduced to a Web site that will be used throughout this book as a case

study, DisabilityNews.net.

Disability News is a clearinghouse for information related to mental health and disabilities. It is targeted toward mental health professionals, students and educators, families of disabled individuals, and people with disabilities.

The following is a project specification, written and compiled by Charlie Bleau, the Web Development Director for Disability News. In retrospect, Charlie emphasizes that not only was the project

specification used to identify the project details, it was also used as a business plan for the entire Web site venture.

Disability News was created under the direction of Greater Lynn Mental Health and Rehabilitation, a leading non-profit organization supporting people with disabilities and their families in the Boston area. However, the best way to learn about this project and its objectives is to read the project specification:



DisabilityNews.net

SERVICE OVERVIEW:

Disabilitynews.net is a comprehensive on-line service for healthcare professionals, families, students, people with disabilities and advocates with a focus on the mental retardation and mental health fields.

Disabilitynews.net is a division of Greater Lynn Mental Health & Retardation Association, Inc. (GLMHRA). The service will leverage GLMHRA's expertise with the dually diagnosed population, specifically the Robert D. Sovner Behavioral Health Resource Center in Danvers MA.

The key components of Disabilitynews.net web site will be:

On-line Publishing Service

On-line Communications Service (on-line chat)

Training Service

The service will be Electronic Commerce enabled for on-line purchases and membership fees the primary means for revenue. Additionally, advertising and sponsorships will be a secondary means for revenue.

Disabilitynews.net will be built in 2 Phases to ensure proper

technical implementation. The following is a project description for the key components in each phase.

Phase 1: To be completed by July 15, 1999

GOALS:

Launch On-line Publishing Service

Launch Training Service

Market Survey to determine feasibility of

Phase 2

On-line Publishing Service:

Users will have the opportunity to purchase journal articles and books on Disabilitynews.net, very similar to the services provided by Amazon.com and Harvard Business Review (hbr.org). Currently, Disabilitynews.net is in negotiations with Psych-Media for permission to publish the *Mental Health Aspects in Developmental Disabilities Journal*. If negotiations are

successful, this will give Disabilitynews.net access to over 20 years of journal articles from the most reputable professionals from the dually diagnosed field. A fee structure will be negotiated with Psych-Media. Biographies and contact information for all authors will be provided.

Additionally, Disabilitynews.net will provide book sales via the site. We propose to partner with Amazon.com through their Associates Program. If our application is approved, visitors to Disabilitynews.net will have

the opportunity to purchase books specific to their area of interest from the vast libraries of Amazon.com. In return, Disabilitynews.net will receive between a 5 and 15% royalty on all sales as a result from the link from Disabilitynews.net. Associates with Amazon.com are given the right to promote this relationship on their site and in any sales literature and advertising. There is no cost to become an Associate and Amazon.com coordinates fulfillment and shipping. It is our hope to eventually expand

upon the book sales portion of the Publishing Service from other sources.

Other Resources will be provided to users such as: community services, support groups, government agencies, other contact information and links on the Web. This material will be searchable by geography or keywords.

The backbone of the On-line Publishing Service is a large database containing the title of articles, subjects, summaries, geographic regions, pricing and

the actual articles. In addition, this database will have the added benefit of being tied into the Amazon.com database for book sales. The e-commerce portion of Disabilitynews.net will play a key role in the database. Once a user has successfully purchased an article through e-commerce, they will be able to download a copy of the journal article, in Adobe Acrobat (*.pdf) file format, onto their computer. This file will be readable in Adobe Acrobat Reader 3.0 or higher (a free shareware

program). E-commerce for books purchased on [Amazon.com](https://www.amazon.com) will be handled by [Amazon.com](https://www.amazon.com).

Launch Training Service:

Online registration and other information regarding the 2nd Annual Training Institute on Mental Health and Developmental Disabilities (sponsored by GLMHRA and the Sovner Center) will be available via [Disabilitynews.net](https://disabilitynews.net). We hope to involve other trade organizations in both the

Training and Publishing Services to expand our service offerings.

Market Research:

The Sovner Center Research & Development Department will develop a comprehensive survey to determine the feasibility of launching the On-line Communications Service and to make adjustments in the services provided in the Phase 1 web site.

Phase 2: To be completed by October 1, 1999

GOALS:

Launch On-line
Communications Service
(Membership Services)
Evaluate successes of On-line
Publishing Service make
adjustments

Launch On-line
Communications Service:

An additional database will be
created to manage the On-line
Communications Service for
Members. If Phase 2 is
implemented,
Disabilitynews.net will recruit

Members via the existing Web site who are interested in gaining additional, fee based services from the Web site. Some examples include on-line discussion groups, on-line support groups, and 1:1 professional consultations. A key component of this service will be the ability to recruit "Professional Members." Professional Members will be doctors, therapists, licensed social workers, and other health care professionals interested in participating in Disabilitynews.net, either by

being an on-line consultant or submitting a research paper or journal article to Disabilitynews.net.

Different levels of Membership will be provided at a certain fee paid via the e-commerce portion of Disabilitynews.net. Basic membership plans will include a distinct number of hours of "public chat." "Private chat" time (including 1:1 consultations) will be provided to members for an additional fee.

Other areas of interest, such as

real estate and property renovations for people with disabilities, may be included based upon the feedback from the Phase 1 Market Survey.

MARKET SUMMARY:

Overall, the Internet and World Wide Web community has been expanding significantly since 1995. According to market research giants Forrester and International Data Corporation, the number of Internet users reached an estimated 100 Million North Americans by the end of 1998. By 2002,

forecasters predict that 20 million Internet users will make on-line purchases totaling \$400 billion (source: Hoffacker, Claudia; *"The World Wide Mall," The Manager*, Fall 1998: page 23). This number is expected to grow considerably over the next decade.

As the general demographics of Web users shift to representing the demographics of the general public (result of price decline of computers and Internet access), more opportunities will become available for more demographic

groups. The current average user of the Web is a male 35 years old, college educated. 80% of Web users are men but these numbers have been changing rapidly.

COMPETITION:

The following is an analysis of potential large competitors of Disabilitynews.net. Each of these Web sites offer similar services as are proposed by Disabilitynews.net.

Psychwatch.com "The Online Site for Professionals in

Psychiatry & Psychology"

Psychwatch provides a comprehensive list of resources specifically for professionals in the mental health field. Much of this information has been gathered through linkages with professionals and organizations participating in Psychwatch.

Psychwatch provides the following services: training information, job postings, journal articles, listings of doctors, an on-line newsletter, and bulletin boards. The service is not fee based (other than Banner Advertising) and is free

for users to access. Graphically the site is very basic and is formatted with frames for easy site navigation. Overall, a very effective site and providing useful information to its target audience of mental health care professionals. No e-commerce.

TheArc.org The Arc of the United States

TheArc.org is a informational site for a general audience of people interested in mental retardation. The site provides a wide array of resources for free or for sale via the site (site is

not e-commerce enabled). Examples include listings of books, government information, bulletin boards, a newsletter, and contact information for member chapters (The Arc is a national trade association). The site also has an affiliation with Barnes and Noble, so there is a means to purchase books on-line through the Barnes and Noble Web site. For a national trade association, the site is not very graphically appealing but it does provide access to a wide variety of information for

users. The site provides straightforward navigation through the use of tables. The target audience is (1) human services/health care professionals, and (2) families and advocates.

Another model site, but not a direct competitor, is the HivInsite Web site sponsored by the University of California at hivinsite.ucsf.edu. This site provides an excellent outline for arranging resources for a particular disability. The site is well organized and is attractively presented given

that it is a nonprofit site. It also shows a great example of utilizing sponsorships, should Disabilitynews.net decide to go this route also with site advertising.

POSITIONING:

Disabilitynews.net will be the preeminent resource for disability-related information and resources on the Web, both free and for-fee services. The Target Audience will be comprised of (1) health care professionals, (2) families and advocates, (3) people with

disabilities, and (4) students and educators from higher education.

Disabilitynews.net will provide customers with the following:

Access to the latest, most current information and resources for disabilities (particularly developmental disabilities, psychiatric disabilities, and physical disabilities)

Convenient and timely access to information

Excellent customer service and response times

Expertise from the most reputable professionals

COMMUNICATIONS STRATEGY:

The Communications Strategy and Web design of Disabilitynews.net will reflect the needs and interests of our Target Audience of (1) health care professionals, (2) students and educators, (3) families and advocates of people with disabilities, and (4) people with disabilities.

A key component of the site will be its ability to present a unique offering of products and services customized for each target audience. This will also include the content and copywriting. Products and Services will be further refined with the analysis of the Market Surveys, which will be distributed to a sample of each Target Audience (currently in process).

The primary means of the Marketing and Communications strategy of Disabilitynews.net is the graphical presentation of

the web site itself. It is important, not only for the site to be attractive, but also to have easy functionality and navigation for users. The site will provide a wide variety of information with many different categories and subcategories, so it is vital for it to present much more organized and straightforward for users.



Task**Completion
Date**

Completion of Phase 1
Technical
Development.

Including: Database
construction,
embedding graphics,
and site layout.

5/10/99

Commence Phase 1
Content Development.

Including: Scanning,
Indexing of articles for
database, and Misc.
materials for site.

5/10/99

Complete Preliminary
Market Survey for
AAMR Conference in

5/17/99

New Orleans

AAMR (American Association for Mental Retardation) Annual Conference in New Orleans. Have all presentation materials for booth.

5/25 28/99

Beta Test Web site with adjustments based on preliminary survey and focus group feedback (use Target Audience sample)

7/1/99

Implement launch
Public Relations

7/1/99

Official Launch Date of Phase 1 Web Site	7/15/99
---	---------

Commence Phase 2 Development with inclusion of final Survey Data	8/1/99
---	--------

Troubleshoot and make refinements	8/1 27/99
--------------------------------------	-----------

Post-Launch Direct Mailing to Target Audience promoting site	7/30/99
---	---------

Commence Post- Launch Advertising	8/15/99
--------------------------------------	---------

8/15/99

Campaign

Commence Post-
Launch Public Relations 8/30/99
Campaign

**Official Launch Date
of Phase 2 Web Site** 10/1/99

National Association
for the Dually
Diagnosed Annual 11/10 13/99
Meeting at Niagara
Falls, Ontario

TASH Conference in
Chicago 12/99

Advertising Plan:

The core advertising will be done in a major roll-out campaign during the months of July and August 1999. The following media will be utilized:

Print Advertising: selected trade newsletters, magazines and journals. These include:

Mental Health Aspects in
Developmental Disabilities
Journal

American Association for
Mental Retardation Newsletter

YAI Newsletter

American Association on Mental
Retardation Newsletter

TASH Newsletter

These selections will be ideal
for building brand awareness
for Disabilitynews.net with
health care professionals.

On-line Advertising: banner
advertising, affinity groups, and
cross-marketing/banner
exchanges will be utilized,
including:

Banner Advertising on health care related and search engine Web sites. Specific sites to be determined.

Banner Exchanges with Web sites marketing to same target audience(s). Examples may include AAMR, McLean Hospital, NADD, Healthcare Providers, and other health care/advocacy sites for people with disabilities.

Advertising in the above areas will allow Disabilitynews.net to reach each of the four Target Audience groups on the Web.

Further research will be done to identify additional sites for on-line advertising.

A total of \$4000 has been allocated in budget for the Phase 1 launch Advertising Plan. Therefore, cost-effective means for both print and on-line advertising will need to be identified.

3. Public Relations Plan:

Public Relations will be an ongoing process for Disabilitynews.net. A combination of trade shows,

conferences, and traditional press placements will be utilized both to announce the launch and build ongoing awareness.

Areas will include

Local/Regional Newspapers in Massachusetts

State and National Trade Association literature

National/International Health Care Magazines

National/International

Web/Internet publications

State/national

University/college newsletters

Tradeshow/ Conference

involvement will also be
utilized to further build
awareness and interest in the
Disabilitynews.net service.

Some preliminary locations
identified, include:

MCHP Annual Meeting in
Boston Fall 1999

NADD Annual Meeting in
Niagara Falls, Ontario 11/10-

13/99

TASH Annual Meeting in
Chicago 12/99

AAMR Annual Meeting in
Washington 5/00

Additional
Tradeshow/conference
involvement will be identified
as information becomes
available.

Estimated Public Relations
budget for Phase 1 Public
Relations
(tradeshows/conferences):

\$8,000

Other Promotion:

Direct Marketing: a comprehensive direct marketing campaign will be conducted to promote

Disabilitynews.net to 1)

Healthcare Professionals in Massachusetts and nationally,

2) Community Healthcare Providers both locally and nationally, 3) Selected

educators in psychology and psychiatry nationally, 4)

Special Education directors and teachers in Massachusetts.

This direct mailing will be sent to the above groups the end of July, beginning of August 1999. The mailing will most likely be a postcard or other cost-effective mailing piece to go out 3rd class bulk rate. Mailing lists will be acquired from both existing mailing lists and fee-based list services. The estimated number of units to be mailed will be between 15,000 and 20,000.

An additional direct mailing will be sent upon completion of the Phase 2 web site in November. We will define this campaign at

a later date.

Total budget for Phase 1 Direct Marketing: \$5000.

Sales Strategy:

A major component to the success of Disabilitynews.net will be the recruitment of advertisers and companies who are interested in selling their products and services on Disabilitynews.net. Based upon feedback received at the AAMR Conference in May, future involvement in trade shows as well as contacting potential

participants in this service personally will be key to the future growth and success of Disabilitynews.net.

It is proposed that a position be made available that will solely focus on developing relationships, networking, and essentially "selling" Disabilitynews.net to other companies. Additionally, this position will be responsible for assisting in promoting the service at trade shows and conferences.

Once Phase 2 is underway, this

Sales/Marketing Consultant will assist in coordinating the On-line Communications (Chat) service and recruit Professional Members.

PRICING PLAN:

The primary means of generating revenue through the Phase 1 Web site will be through the sale of Journal articles and other publications on-line.

An average article fee of \$7 has been established for purposes of this marketing

plan. For journal publishers, we will mark up journal articles by 100% for on-line sale 50% of the revenue to the publisher and 50% for Disabilitynews.net (currently in negotiation with Psych-Media). Buyers will purchase each article at a premium in exchange for receiving the article of their choice on demand (i.e., a convenience premium). Essentially, Disabilitynews.net will operate as a Value Added Reseller (VAR) in the distribution channel. Additionally, if approved, we

would also receive royalties from being an [Amazon.com](https://www.amazon.com) Associate as mentioned earlier.

E-commerce will be the primary means for processing all transactions.

The following is the proposed Pricing Plan for the Phase 2 web site:

Membership Fees: 4 membership packages have been established for [Disabilitynews.net](https://www.disabilitynews.net), all with different offerings:

Membership Plan 1 (Basic Plan): This includes 5 hours of Public Chat, access to additional resources, email monthly newsletter w/updates and other links not offered to non-members. Additionally, web site customization at login based upon past purchases, and areas of interest indicated in membership application. This membership plan has a 6 month duration. Planned cost: \$50. Renewal cost: \$40.

Membership Plan 2 (Family Plan): This includes 10 hours of Public Chat, access to

additional resources, email monthly newsletter w/ updates and other links not offered to non-members. Additionally, web site customization at login based upon past purchases, and areas of interest indicated in membership application. This membership plan has a 1 year duration. Planned cost: \$80. Renewal cost: \$60.

Membership Plan 3 (Corporate Plan): This includes 30 hours of Public Chat, access to additional resources, email monthly newsletter w/ updates and other links not offered to

non-members. Web site customization based upon type of business/organization with more of a business emphasis in presentation. This membership plan has a 6 month duration. Planned cost: \$200. Renewal cost: \$200.

Membership Plan (Non-profit Plan): This limited membership allows access to additional resources, email monthly newsletter w/updates and other links not offered to non-members. No public chat and web site customization. In order to be eligible, non-profit

must present a valid Federal Non-profit Identification code need 24 hours for varification. This membership plan has an indefinite duration and does not cost anything for a valid non-profit organization.

2. Private Chat: Private Chat will be a unique service offered by Disabilitynews.net. Pricing for this is based upon a "sliding scale" depending on the number of participants 1 to 5 people and the credentials of the professional facilitating the Private Chat session. Each professional has been

designated an average hourly rate for services. Individual rates may need to be established depending on the reputation and credentials of the professional.

RESOURCES:

Web Development Director 20 hrs/wk:

Provide management oversight of the service during and after project development phases.

Web development and Web site administration

Manage contractors

Scan existing journal articles

Meet with CEO for approvals
and input in project
development

Senior Editor 8 hrs/wk:

Manage the organization of
editorial content, including
content creation for Web site

Editor/R&D Consultant 4
hrs/wk:

Assist in organizing editorial

content

Scan journal articles

Editor/R&D Consultant

Recruit sponsors and other
trade publications

Provide editorial consultation

Develop market survey and
statistical analysis

Sales Consultant

Network with providers, trade
associations, and educational
institutions to recruit

advertising and product offerings

Attendance and representation at conferences and trade shows

Marketing Consultant

Network with providers, trade associations, and educational institutions to recruit advertising and product offerings

Coordinate Professional Membership and On-line Communications Service

The site should be very functional, yet it needs to be eye-catching for the target audience. Please refer to Attachment 3 for a hard copy of the HIV/Aids Web site sponsored by the University of California at San Francisco. This Web site is very functional yet has a professional, eye-catching representation. Additionally, the HIV/Aids Web site has some similarities to the proposed DisabilityNews web site i.e., the way information is organized and presented.

Graphics to be created include

Large Logo bar for home page

Small Logo bar for subsequent pages with page identifier

Navigational Bar (to be used on all pages)

Buttons/bullets and horizontal separators

Background graphic

Additional graphics may be needed as the project progresses.

After development of a "demo

site" depicting the overall theme and presentation of the Web site, input will be requested from a cross section of the users of the Web site.

Based on this feedback as well as internal feedback from GLMHRA and other contractors, creative work on DisabilityNews will be finalized.

Content Development

All content relating to the marketing and purpose of DisabilityNews will need to be developed from scratch. In

other words, content on the home page and other pages will need to be written most likely the Web Developer.

Clinical content and papers will need to be organized by someone designated as "Editor." This person will have the responsibility of locating information, and getting any necessary permission waivers, to be reprinted on DisabilityNews. Administrative supports may be needed to retype information in hard-copy format. Additionally, the Editor will be responsible for locating

directories and other information sources to be included in the "Links" section.

All papers and resources will then need to be integrated into a comprehensive back-end database Based on "type of disability" as a search criteria. Additionally, the database will need to be searchable by geographic location, specific words and phrases, title of papers, etc. An RFP will be sent to various database contractors detailing this information and asking for a bid on the project.

Information presented on the web site and in the database will need to be updated regularly. It is suggested that the database contractor develop an easily accessible, password protected access area where information can be updated on the database on a regular basis.

Technical Development

DisabilityNews will be built utilizing HTML, Perl, back-end database (type to be determined by database contractor), and JavaScript.

The web server will be a virtual host with a local Internet Service Provider. The server will need to be an UNIX and/or NT platform supporting Perl scripting, a back-end database, Front Page Server Extensions and Microsoft Site Server Commerce Edition (needs WinNT).

The hosting company will provide comprehensive e-commerce capabilities through Microsoft Site Server Commerce. Will establish a new account for DisabilityNews with them.

The "Chat Room" will be built using currently available off-the-shelf software any necessary software licensing will be purchased.

Further information about Technical requirements will be finalized based on input from Database Contractor.

Site Map/Navigation

Please see Attachment 5 for an outline of the proposed Site Map.

Section 1: Home Page:

Current News and information
from Professional
Members specifically
highlighted and promoted

Other news and information
printed w/permission from
major news sources

Links to: 1) Resources
(searchable by disability,
author, other keyword); and 2)
Membership Registration.

Section 2: Resources

Public

Database searchable by disability, author, or other keyword

Links to available papers, links and other resources pertaining to specific disability. User can purchase papers/pubs individually the e-commerce software will provide a "Shopping Cart" option.

Private/Members-only (username and password protected)

If user clicks on one of the following "members-only" links,

user will be prompted to become a member ... will link to "Membership Registration"

Training and Conference Info
(specific to disability)

Public Chat section (specific to disability/guest speaker??)

Private Chat section set up an appointment with physician, clinician or other professional in the field relating to the specific disability.

Directory of Professional Members

Other Resources and Links to Service Providers

Section 3: Membership Registration

Offers Membership options with separate pages for General Members and Professional Members.

New members will need to fill out a form with 2 payment options by mail or via e-commerce. General membership options will be available for different "a la carte" items (i.e., 2 hours of

chat, 4 hours of chat plus a free training, etc.)

Once members have submitted payment option, will then receive an email back with registration confirmation.

Professional Members will be provided with an email address for them to send in papers or other information they would like posted on DisabilityNews.

Maintenance Schedule (i.e., Service & Support)

The Web Development Director will maintain DisabilityNews

daily. The Editor will provide new information to be posted on a weekly basis (or as new information comes in).

Milestones (how will we measure success?)

Success of the DisabilityNews proposal will be based upon the following criteria:

Successful coordination of all necessary resources needed to complete this project (as outlined in this Business Plan)

Successful completion of

project on schedule

Successful use of Beta testing of web site receive input from a cross-section of the various user groups.

Successful launch of web site and necessary post-launch marketing activities

Successful acquisition of both general members and professional members. Will evaluate effectiveness 6 months after launch.

The success of this project

depends heavily on the ability to recruit Professional Members for DisabilityNews. Professional Members will provide their papers and research to be displayed on DisabilityNews. Because we won't have the linkages with Professional Members outside of GLMHRA and the Sovner Center, heavy marketing and recruitment with these professionals from across the country needs to be undertaken before and after the launch of the web site. Hopefully, the success of DisabilityNews will promote the

site itself in professional and academic circles. Only time will tell if this assumption is overly optimistic it will be evaluated on an ongoing basis during and after launch.

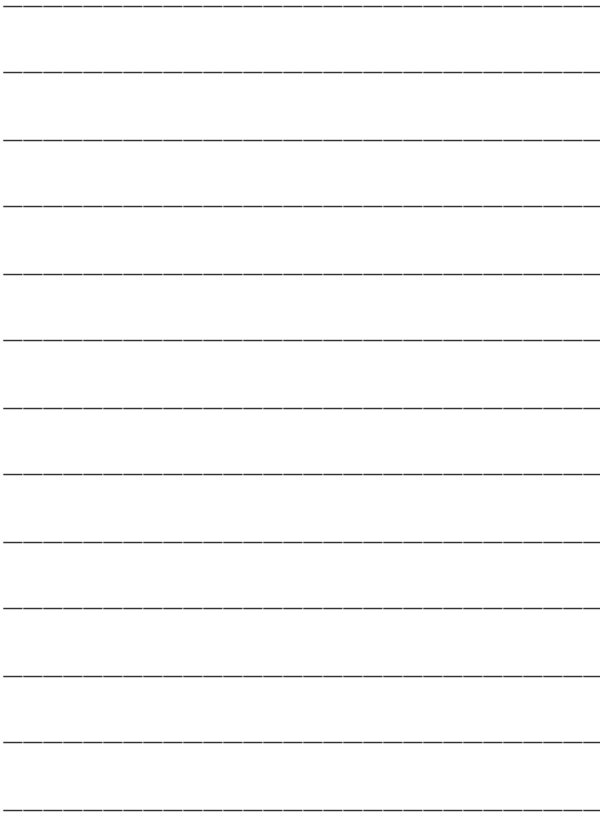
Lab 10.3 Exercises

10.3.1 Establish Web Site Hierarchy

If you were to ask a graphic designer to areas, what would they be?

a)

Create a flow chart for events described
Disabilitynews.net.



b)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

10.3.2 Write a Project Description

Which topics do you feel need to be cov

there any points here that you feel need
do you feel is detailed particularly well in

a)

Write a sample project description for yc

b)

10.3.3 Identify a Project Budget and Schedule

The budget is intentionally missing from Disabilitynews.net. However, there is a d Web (don't forget database developer Disabilitynews.net's project specification of \$500/week to cover administrative a of this project.

a)

Develop a schedule for your favorite We
[10.3.2b](#)).

b)

Lab 10.3 Exercise

Answers

This section gives you some suggested answers to the questions in [Lab 10.3](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

10.3.1 Answers

If you were to ask a graphic designer what areas, what would they be?

a)

Answer:

Check out <http://www.disabilitynews.net> to the final product.

Create a flow chart for events described on [Disabilitynews.net](http://www.Disabilitynews.net).



b)

Answer: *Again, visit <http://www.disabilityr> came to the final product.*

10.3.2 Answers

Which topics do you feel need to
there any points here that you feel
do you feel is detailed particularly

a)

*When it comes to a project spec,
coding, testing, implementation, &*

A few years ago, having only been on a subcontracting project for a local Web site. The client had a very small budget and was not well prepared with financial resources. The client made a significant investment in this project and the project team.

Unfortunately, a project specific contract was not signed and the Web firm. Thus, the client and the project manager were at odds with the scope of work. The project manager was at wit's end and was against the requirements of the scope. The project was an open-ended project that had no end date. There was no way the project manager or the client could control the project.

The disgruntled and disappointed client and the subcontractors were left with a project that was highly unlikely that they would complete the project.

Answer:

Taking two weeks to develop a work plan most likely ensured this project's success. The subcontractors defined scope of work. Most important, the project manager defined the scope of work.

good profit on this project, solidi-
probably garnered a great deal of
obvious to me, as one of the subc
a great deal of effort to managing
money. It was very unfortunate f

The project specification for [Disal](#)
of the site particularly well. Plans
important as the build, if it's to be
Bleau, the author of the project s,
very strong marketing background

Write a sample project description

b)

My favorite Web site is usually the building. I guess that's what makes my occupation for me.

This specification is one that I wrote as an example for the students in my VLSI course. It definitely falls short on discussing the business plans covered by Charlie's project, but the technical summary, clearly defining the requirements, I believe it to be a more than accurate representation of the names of both the Web firm and the project, and protect the confidentiality of both.

Answer:

**Acme Personnel, Inc. 888 Internet
Avenue,**

Anytown, MA 00000

**Phone: xxx.xxx.xxxx Fax:
xxx.xxx.xxxx**

Email: ack@acme.com

Project Mission Statement: To establish Acme Personnel, a permanent placement firm with a Web presence that attracts both hiring companies and qualified applicants. Acme Personnel specializes in permanent placement for software professionals with local high-tech companies. Providing clients with the assurance that the firm is searching on their behalf to place the right person today in the right position, Acme Personnel helps companies better serve their customers in the future and software professionals reach their career goals.

Site Overview: Acme Personnel will provide a facility for its contracted companies to post job opportunities on its site. An additional feature will present job seekers' resumes. Marketing information about Acme Personnel will be included, as well as a possible page that offers links to

on-line education, town information, and day-care facilities.

Audience: Human Resources managers from local software companies and upwardly mobile software engineers.

Creative Development: Cyber Warrior Web Design will begin addressing Acme's need for an effective graphical presentation by developing a logo, a button (which will be embedded with text for the various sections of the site), and a background.

Acme Personnel specializes in placing software professionals. Thus, a professional look and feel, which might appeal to this segment of job seekers, would be appropriate. Computer industry related images and an enthusiastic upwardly mobile message should be incorporated into the site. The site, telco.com, was mentioned as having a desirable look and feel.

Cyber Warriors will develop three sets of buttons, logos, and back-grounds and present them to Acme by August 5.

After developing the overall look and feel of the site, Cyber Warrior Web Design will consult with Acme to develop secondary graphics, which enforce the message in the various sections of the site. Graphics should be used judiciously, having a distinct purpose, as they slow page-loading time. All graphics will be saved in a low-resolution format.

Content Development: Cyber Warrior Web Design will consult with Acme Personnel to either repurpose existing content or to develop new material expressly for the Web site. Possible suggestions include helpful hints to job seekers, links to information regarding relocation and education, marketing information about Acme Personnel, and forms that both job seekers and hiring companies can submit

for review containing resumes and job postings, allowing Acme to review this information for possible inclusion into its database.

Two database tables (their functionality will be detailed under Technical Development) will present resume and job posting information. These databases will be searchable by position, skills, geography, and salary requirements. The resumes should reside in an area that is password protected, so that only authorized companies can access this information. The job postings can be publicly accessible.

An administrative back room will be built (see Technical Development). This area will be password protected and will allow Acme to add, modify, and delete job posting and job-seeker information, as well as searching under specified categories.

Technical Development

This site will be built utilizing HTML, Perl, a mySQL database back-end, and possibly Java and JavaScript. Server requirements include UNIX platform, Perl 5.0, mySQL. Front Page extensions are *not* necessary. Plans at this time are to install the site on the server owned by We Host 'Em, a local hosting company. Another future option includes Host.Net, located in Anytown, MA.

A UNIX platform provides for greater functionality and security than the NT platform and is the appropriate choice for a site of this type. HTML will be used to code the standard Web pages. Perl will be utilized in conjunction with the mySQL database back-end to build the Acme database and for CGI interactive functions. JavaScript and Java applets may be used to create a more interactive graphical presentation.

This site will be best viewed in Netscape Navigator 2.0 and Internet Explorer 3.0 and above.

Database Functionality

Two database tables will track job-seeker and job-posting information. Both tables will need to be searchable with with an AND interface (i.e., Position AND Salary Requirements) or by a singular criterion (i.e., Geography). Links will be provided to more detailed resume and complete job posting information. These files will be uploaded to the server as text files and coded with a number that mirrors the Access database numbers assigned interoffice.

A separate database table will track authorized company names with their user names and passwords.

Job Seeker Table

This table will be password protected. Distinct user names and passwords will be assigned to authorized companies, allowing them to view its contents.

TABLE RESUME FIELDS

id, name, contact_person, current-company, skills, salary, location-desired, desired_position

The id number will link to a separate file, "id.html", which will be a text file containing the candidate's text-based resume.

Administrators at Acme will need to blank out the name and current company information from the resumes before uploading them.

Name will be a "hidden" field not shown to the user. This will be included as an administrative back-up alternative, in case the interoffice numbering scheme fails due to misfiling, etc.

This table will be searchable by skills, salary, location-desired, and desired-position by the user. It will be searchable by name, id, skills, salary, location-desired, and desired-position through the administrative back room.

"Hits" that bring up candidates who currently work at the company that is searching the database will be dropped and not shown.

Job Posting Table

TABLE JOB FIELDS

id, company, contact_person, skills, salary, geographical-location, position, date

The id number will link to a separate file, "id.html", which will be a text file containing the company's detailed text based job posting. Administrators at Acme will need to blank out company information from

the job postings before uploading them.

Company will be a "hidden" field not shown to the user. This will be included as an administrative back-up alternative, in case the interoffice numbering scheme fails due to misfiling, etc.

This table will be searchable by skills, salary, geographical location, and position by the user. It will be searchable by company, id, skills, salary, geographical_location, and position through the administrative back room.

Records should be automatically deleted from the system after resid-ing there for over thirty days.

User Name/Password Table

TABLE USER FIELDS

user_name, password, company

This table will be searchable by user_name and company.

An administrative back room will be created for all tables with an add, modify, delete, and the aforementioned searching capability.

Forms

Two forms will reside on the site that allow the user to input either job-seeker or job-posting information. This information will be e-mailed to Acme Personnel, giving Acme the option to follow-up with the prospective candidate or company.

The candidate form will first present questions regarding desired position, current role, skills, current company, and then contact information. Name, address, city, state, zip, day-time phone, evening phone, and e-mail will be required fields.

The job posting form will include company name, contact name, address, city, state, zip, phone, position, skills required, and salary range.

Training Requirements:

There will be an extremely simple user interface used to maintain the database. Still, Cyber Warriors will provide two hours of on-site training. This should be adequate to bring staffers up to speed.

Marketing and Launch Plans:

Acme Personnel should plan to include the URL address, www.acmepersonnel.com, in any marketing materials, advertising, and/or business cards.

The site will be submitted to the major search engines, Excite, Webcrawler, Infoseek, Lycos, Hot Bot, Open Text, and Alta Vista, as well as the Yahoo directory.

Keywords will be devised that include all of the categories under which this site should be listed, as well as names of possible industry competitors. Some search engines take up to 4 - 6 weeks to update.

Optional additional marketing work can be done after the site is operational 5 - 6 weeks. Research will be done to determine where the site resides in the search engines, and it will be determined whether further marketing strategies should be implemented and whether these strategies would be cost effective.

Authorized Cyber Warriors Representative

Authorized Acme Personnel Representative

10.3.3 Answers

The budget is intentionally missing Disabilitynews.net. However, there is a Web (don't forget database development) Disabilitynews.net's project specification of \$500/week to cover administration of this project.

a)

Phase One of this project lasts approximately 3 months of implementation. The marketing plan will be developed over a three month period. The site will be launched during the initial period is the most intense, and will be analyzed. Phase Two will last roughly 6 months.

Administrative costs (1/2 time) of \$10,000

Database Programmer 80 hours

Graphic Design 60 hours @ \$40

Project Manager (1/2 time) over

Answer:

Content Editors and Providers 8

Marketing Analyst 40 @ \$40/hc

Cost of Domain Name

*Hosting and Setup fees over 18 m
avg.*

Cost of Marketing Initiatives to b

TOTAL PROJECT ESTIMATE (w/o

Develop a schedule for your favorite
[10.3.2b](#)).

b)

Project analysis

Graphic design (taking place as d

Database and HTML programmin

Answer: *Embedding graphics into site*

Testing

Initial population of database

TOTAL PROJECT LENGTH

Lab 10.3 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) A project specification

1)

1. _____ can double as a business plan

- _____ defines the scope of work
- _____ defines the billing schedule

(True/False) A significant hidden cost that many project managers can tend to forget about is

2)

1. _____ Bringing the clients out to lunch

- _____ Administrative costs
- _____ Their own salary (project management costs)

Chapter 10: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

Determine your own bidding

- personality. Do you think that you'd have a tendency to overbid or underbid Web projects? Why? You can do this by locating a Web site with which you are aware of the budget (use the Disability
- 1)** News site if there is no other). Knowing what you do now, how would you have bid that Web site? It's important for you to understand what your tendencies are so that you can automatically adjust them to make the sale or make the project more profitable for the firm.

- Many Web firms start out with sole-proprietor status. Later, they
- 2)** incorporate. What are the reasons that most businesses incorporate? What shift in project requirements might cause a Web firm to incorporate?

Describe a Web project in which a full-

blown project specification might not be cost-effective to develop. If a

- 3)** project specification was not written, how would you assure that the client's expectations and the project team's vision were in agreement?

Chapter 11. Creative Development



*"If you can't define
'Done', don't do it."*

Chapter Objectives:

In this chapter, you will learn about

- ✓ [Content Identification](#)
- ✓ [Graphic Design](#)

✓ Writing and Editing

One area that requires the most client management is content development. Most Web developers find building databases and interactive CGI programs preferable to designing graphics and presenting copy, because the requirements are relatively clear the program either works or it doesn't.

The success of a graphic design, writing, editing, and/or lay out initiative is so

subjective to what hits a client's fancy that it can be more difficult for a Web firm to succeed and be profitable in this area.

As much as possible, we try to make the client responsible for our creative initiatives and document any and all conversations regarding this sub-ject. That way, if the client has asked us to develop using a blue background and red logo, and we have completed this task, the firm has this documentation to fall back on if the client does an about-face

and demands red background with a blue logo.

To a client, I'm sure this doesn't sound like a big request.

However, to the Web firm, which must pay a good graphic artist \$40 an hour, it's a big deal. When I first began to build sites, I would go through the local fast food drive-thru and wonder if the person serving me my hamburger was doing better per hour than I was. This is because 90% of Web sites are flat bid up front. If there's no documentation to support that the client veered

from their original direction, the project manager has a hard time billing any additional hours to the client.

Another area that makes content development difficult is a scenario in which the client keeps changing their copy. Many clients see changing Web documents as being as easy as making a change in the word processing program. True, if the changes don't impact on the site hierarchy or radically change an entire page, it does not entail a morning of an HTML developer's time.

However, if there's some fairly complicating formatting on the page, which needs modification after being built to a client's earlier expectations, this causes a time overrun. In the Web development business, time is money. If the Web firm graciously makes these changes with the idea that the client will not yet again change their mind, often the client will do just that, expecting the Web firm to turn tail yet again and make changes on the fly. In a project specification, the project manager can stipulate

that after two to three exchanges between the client and the firm with regard to the Web site copy, the content will be locked. Any additional changes will need to be implemented at the end of the project.

The success of how everything goes really hangs on how honest and up front project managers are with their clients. I often use the same analogy that I used in [Chapter 8](#) with my clients, and it works out extremely well: If we've painted the living room yellow,

please don't expect me to get excited about painting it pink for free.

As a business grows, so do your choices when it comes to keeping long-term clientele. I have clients that I'd walk through fire for. I feel a very strong sense of loyalty to them, and I'm very grateful to have a working association with them because not only are they good businesspeople, they are good people, period. When they call my firm, they know what they want. And if they do not, they understand that we are going

to put together mock-ups, and our time needs to be covered. It can't be an open-ended sort of deal where we work until we make something the client likes. They know that I'm sincere about wanting them to be 100% satisfied, but they know that this is my living, and I can't afford to work for free, so they respect our need for a defined scope of work.

Fortunately, as time has gone on, I've had the luxury to drop those clients who do not value my firm's time. No one likes to turn someone away. I certainly

do not. But, after a pattern exists the person is difficult to deal with, the person keeps changing their mind, and/or it's then difficult to collect payment there's no reason to keep these clients on, as they are highly unprofitable.

Again, these are all client management issues that seem to become stumbling blocks more in the content development stage than any other, once a contract is signed.

In mentioning the pitfalls and typical scenarios encountered

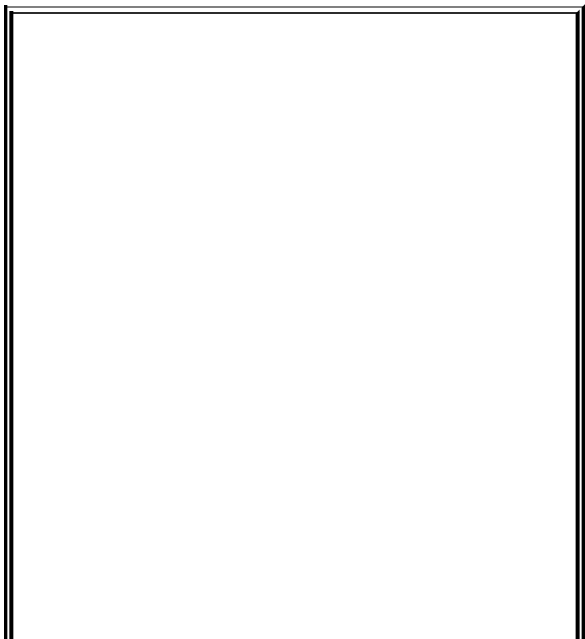
during this phase of Web site development, I'm really just urging project managers to be as clear as possible with the client. Never take something on faith, but rather ask the question before work progresses. Therefore, if work is being done according to a client's instruction and it is later rejected for reasons other than the quality of the work (e.g., a change in direction), the Web firm does not have to take on the financial burden of this change.

Most people who go into Web

developing as a career truly enjoy the creative aspects of it. As a former software analyst, I found the use of graphics and written copy quite liberating. Suddenly, the Web site becomes a sculpture, and the computer is a chisel. As long as the lines of communication remain clear, this can also be a very rewarding phase as the client sees their vision take shape. Often, it's the successful completion of creative tasks that really cements the relationship between client and developer, helping to seal the

client's faith in the Web firm's ability to perform other noncreative tasks.

Lab 11.1: Content Identification



Lab Objectives:

After this lab, you will be able to

- [Conduct a Client Creative Interview](#)
- [Establish Branding](#)
- [Identify the Main Ideas](#)
- [Storyboard the Web Site](#)

In [Chapter 10](#), we discussed putting together client questionnaires, assessing their goals for the Web site. In the content development phase, we

must identify specifically how the Web site will help the client to attain these goals through written copy and graphical presentation.

David Siegel's wonderful book, *Secrets of Successful Web Sites*, suggests sending the client on a field trip, asking them to rate sites based on appearance, content, and functionality. This is a great way to get a feel for what the client is attracted to and sees as a priority. Do they want multimedia presentations, using technologies such as

Macromedia Flash (an application that incorporates sound and graphic animation seamlessly) to impress their customers? Or would the client rather present a site that makes information very easy to get to, so visitors will have an immediate feel for the navigation scheme and can immediately get where they want to go?

Consistency throughout the site reinforcing the client's logo or "brand-ing" is also important. One often hears the estimate in the advertising

industry that individuals need to see a message seven times before it really begins to make an impression on them. We like to keep repeating a client's logo not just because we want to be sure that the visitor knows that he or she is still within that client's Web site but because it helps to reinforce the logo or the brand name in the visitor's mind. That way, if through cross promotion the visitor sees print, television, or advertising on other Web sites, the chances for instant brand recognition increase. Consumers tend to

feel more comfortable about opening their wallets for a "familiar face."

As the client is identifying their goals for building a Web site, the creative team can also help the client to consider the main messages being communicated. If the firm is selling computers, do we want to key on the fact that this firm is particularly good with customer service, can access any and all parts, whether discontinued or currently in production, or offers the best prices anywhere? Perhaps it's a

combination of all of these messages that is important. The creative direction and the functionality will all support these ideas.

If a financial advisor wishes to build a site focusing on a particular sort of mutual fund, is it better to project the image of being an old, well-established firm that has been around for a thousand years, or should the image be highly edgy and contemporary? While an edgy, more casual image might work very well for a Web firm, consumers want to see

stability when initiating investment activities. So the message goes beyond what is written on the screen to the subliminal impressions a visitor may have while at the Web site.

Hopefully, in the process of identifying main ideas, a story will emerge. Drawing on the hierarchy developed during the project specification stage and incorporating the creative team's (including the client) creative ideas, one can "storyboard" the site. Often, very savvy clients have already

done this. They come with designs written on graph paper or even napkins, and it's all extremely helpful. Even if a client can use squares or circles to block things out on a piece of paper, it's a fantastic start. From there, the creative team can refine the design and effectively storyboard the site.

Lab 11.1 Exercises

11.1.1 Conduct a Client Creative

Interview

Your client owns a venerable old bookstore community for over seventy-five years. value of offering goods and services over with [amazon.com](https://www.amazon.com) but want to emphasize personalized attention and perhaps create Amazon. What types of questions would distinguish itself from Amazon, what might content?

a)

A small Mom and Pop computer store w
image on the Web in hopes of attracting

questions would you ask them? What m

b)

11.1.2 Establish Branding

Give three examples of how branding can
think is best? Why?

a)

[illegible]

How would you establish branding on the
[11.1.1a](#)?

b)

11.1.3 Identify The Main Ideas

What sort of strategies might you use to identify the main ideas they wish to convey in their text? How do you think the ideas a visitor would pick up in a sub

a)

Give three examples each of the direct c
a subliminal message.

b)

11.1.4 Storyboard the Web Site

How would storyboarding the bookstore better facilitate the creative development

a)

Storyboard your vision of the bookstore

b)

Lab 11.1 Exercise Answers

This section gives you some suggested answers to the

questions in [Lab 11.1](#). with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

11.1.1 Answers

Your client owns a venerable old b community for over seventy-five value of offering goods and servic with amazon.com but want to en personalized attention and perhap

Amazon. What types of questions distinguish itself from Amazon, with content?

a)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

- *Who does the client want to*
- *Is the client targeting people with an on-line alternative?*
- *Is the client trying to attract*
- *How does the client see their*
- *Is the client comfortable with well-established old booksto*

Answer:

to support this? Or, are they

- *What makes this bookstore*
- *Would the client be comfortable, who might specialize in recommendations?*
- *Are there any logos or graphs would like to adapt for the V*

A small Mom and Pop computer store
image on the Web in hopes of attracting
questions would you ask them? V

b)

- *To add credibility, what kind of testimonials would they feel comfortable giving and including them on their website?*
- *Of the Web sites maintained by the client, which ones does the client feel are most credible from their perspective?*

Answer:

- *What themes do they wish to see on the website enough to have a wide involvement in the community? They wish to make no reference to the Corporate Entity TRUST US*

- *What sort of navigation will they wish to push?*
- *If the visitor has ten seconds, what message will the client wish the message to be?*

11.1.2 Answers

Give three examples of how brands think is best? Why?

a)

Three ways to establish branding

- *Domain name*
- *Regular use of logo embedd*

- Use of logo as a watermark

Answer:

I like to establish branding using a watermark. Unless the company is well known, a watermark can give a better ranking with the search engines. However, if the company would want to be for a long time, a watermark can obscure the text. While a watermark they take away from communication.

Using a navigation bar that incorporates branding throughout the site firmly roots the branding, threatening other useful features.

How would you establish branding
11.1.1a?

b)

First, I'd use the method of firmly would be sure to include the logo Web sites. Any ordering text-based name of the bookstore. If the use logo can be sent as part of the e-

Answer: *Also, offer license plates on the s visitor can download and place on Internet Explorer 5.0" or "Netscape with messages like "I get the best or "I belong to THE World Wide Web via the bookstore's site and make*

11.1.3 Answers

What sort of strategies might you use to convey your main ideas they wish to convey in a presentation? What are the ideas a visitor would pick up in a presentation?

a)

The following questions might be

- *Picture having thirty second. want the potential customer*
- *Do you like a casual, edgy, c image?*
- *Are you interested in attract*
- *You have ten keywords to u. What would they be?*

Answer:

Give three examples each of the

a subliminal message.

b)

The following are examples:

- *Direct Message* Placing text on a financial services firm has on various positions held by me

Subliminal Message The use of words that speak of upscale conservatism

- *Direct Message* Including a list of books in a bookstore was founded based on the fact that it share this with others. The list is for its customers, because the company wish to cater to them.

Answer:

Subliminal Message Picture

*cup of tea around a fireplace
employee at the store. Perhaps
book signing at the store su*

- *Direct Message Our hardw
large corporations. We will h
our specialty.*

*Subliminal Message Picture
with happy customers. Pictu
reminiscent of fonts and log
store.*

11.1.4 Answers

How would storyboarding the book
better facilitate the creative devel

a)

If the client is fairly reasonable to storyboard is a good tool, like an exact model. This is best accomplished. Whichever way vagueness can be will only help the process.

True, there are times when you go out of the creative decision-making process. I sometimes find myself out of the creative decision-making process. But we can complete the project to the point where we can make comments like, "Our graphics are not what we ultimately trying to communicate about it." And sometimes that can happen.

Answer:

However, if the client not only can't decide, but also do not either, I sit them down with me and go through the storyboarding process and tell them what they can do by the end of the week. If it's not possible, we have to bump the site out of its place and have to reschedule at our convenience. The client can settle on a vision.

Storyboard your vision of the book cover.

b)

The following is a rough front page navigation on the side.

- [Great New Fiction!](#)
- [Book Group Chat](#)
- [Biographies](#)
- [Kim Recommends](#)
- [Non-Fiction](#)
- [Children's Section](#)
- [Our Newsletter](#)
- [Coming Soon!](#)
- [Bulletin Boards](#)
- [Shopping Cart](#)
- [Search for a Book](#)
- [Contact Us](#)



Kim's Book Nook

On the Shelves



Travel



New and Noteworthy



Adventure



Nature

Lab 11.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) Creative development can be difficult because

1. _____ Clients' requirements can be vague due to the subjective nature of evaluating artwork.

1)

- _____ Subliminal messages are so difficult to convey on the Web.
- _____ Most graphic designers want to create Web sites their own way.

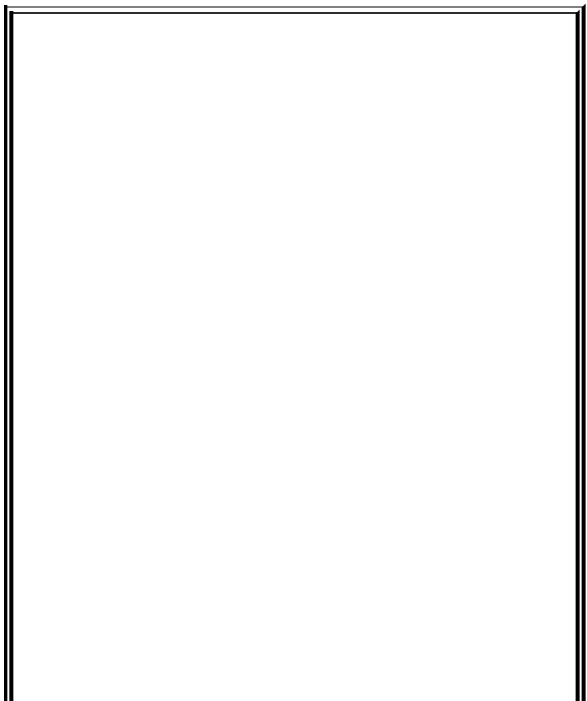
(True/False) When there is a difference in opinion about whether a certain

creative direction was authorized by the client, the project manager can refer to the

2)
1. _____ Creative interview

- _____ Web site storyboard
- _____ Graphic artist

Lab 11.2: Graphic Design



Lab Objectives:

After this lab, you will be able to

- [Write a Creative Brief](#)
- [Invite Feedback](#)
- [Identify Site Look and Feel](#)
- [Create Finalized Graphics](#)

Often a Web firm comes into a project in which the client really doesn't know what he wants. All he knows is that he wants a cutting-edge Web site

up by a certain date. The client wants the site to be individual, communicate his message, perform the functionality, and represent him well. However, this person may not have a picture of this in his head. Some will be led. Others want the firm to keep presenting ideas until they see something they like. Unfortunately, this can work against both parties.

Creative can be one of the most difficult processes to get the client through. Even if the programming involved with a Web site is much more involved

than the graphics, it is not what the client sees. The programming contributes to but does not directly communicate the client's message.

If you ever go shopping with a friend, you might find that you both like jeans and T-shirts. But when you pick out the look that works for you, it may be a baggy pair of jeans and a big red 100% cotton T-shirt, with a pocket on the left. Your pal likes a smooth fit and a straight leg cut. She wants a pink V-neck T-shirt that she can wear under her white cashmere

sweater. You both like jeans and T-shirts, but the style is very different. How one company views a certain concept does not always add up to how another will view it. Almost every Web build I have been involved with has had the creative effort initially described as requiring a clean, cutting edge, and professional look. In the end, these characteristics meant many different things to the people involved.

Creative development is almost like buying clothes for someone

who will keep sending you back until you buy them exactly what they want. You have to try to picture what is in someone else's head, understand their tastes, and act accordingly. Informing the client up front that there will be so many composites and so many revisions might help. However, that can be intimidating to the client. Some firms will display their portfolio and charge an up-front cost just to develop composites. If the client likes them, then perhaps with some revision,

they will design the Web site. However, if the client does not like the comps, he is welcome to pay for another set of composites through this firm or to shop at another Web firm. This makes a great deal of sense, businesswise, in limiting the exposure the firm has to doing wasted work. Still, I can think of several projects that I was able to bring to a profitable end that would not have been finished that way. So much depends on the client involved and how much risk the Web firm wishes to assume.

Sometimes a client will become stuck on a particular issue. The project manager knows that it would be much easier to solve the problem than to argue about it. But for whatever reason, the problem cannot be solved. If the client has a very vague idea of what he wants the Web site to look like but just cannot describe what he wants, the project manager can offer suggestions but cannot make the client decide. You can well understand the client's dilemma, but that dilemma is a project killer. Having been

through enough projects, the project manager can recognize the dynamic, is aware of how this can stop forward movement, and how thoughtful communication might keep things on track. In the long run, it won't benefit the client to have the project go incomplete. This is where the project manager needs to take an assertive role and make the client aware of the schedule, the financial obligations involved with bringing in another graphic firm to present more ideas, and try to ease him

into something that he likes. Web sites can change the face they put forth several times in a year. If there are elements that don't make it into Phase One, there's always Phase Two. However, the point is to get the Web site up and get it working to benefit the client. If the Web site is making money for the client, he might even forgive you for pushing him along during Phase One.

A creative brief will take the information derived through storyboarding and client interviews and discuss the

creative initiative for the Web site. Target audience, client preferred sites, and sample creative directions should be included. This is yet another tool that can be used to help define the project. However, the creative brief does not just encompass graphics, it covers the written copy to be embedded into the Web site. A marketing firm whose Web site I absolutely love, called The Big House (www.bighouse.bc.ca) clues clients into their process. They look for answers to the following questions:

- What is the project meant to accomplish?
- How will we know that we have accomplished our goal?
- What is the main idea that must be communicated?
- If the consumer can only take one idea away from the Web site, what must it be?
- How does your product stack up against the

competition?

- Tell us why your firm is unique, best, or first at.
- What marketing tools are most effective for your company? Among your competitors?
- What's in it for the customer? Prove it.
- What is your brand personality? Examples: Professional, exciting, irreverent, humorous,

outrageous, etc.

- Sometimes referred to as the "target consumer," this group can be described by age, profession, geographic location, or attitude.
- How do we want our viewer to react? What would be the ideal response?
- What are the mandatory items that need to go into the site?
- Define a budget amount so

a range of solutions can be considered. What is the roll-out sequence? When must the program be finished?

- Background detail, other important considerations, notes on the competition, potential problems, format restrictions, etc.

Lab 11.2 Exercises

11.2.1 Write a

Creative Brief

Interview a friend or relative who owns l
or her answers to the The Big House's q

a)

Write a creative brief for the prospective

b)

11.2.2 Invite Feedback

How would you best present a creative

Handwriting practice lines consisting of 10 sets of three horizontal lines (top, middle, and bottom lines) for letter formation.

a)

Handwriting practice lines consisting of 4 sets of three horizontal lines (top, middle, and bottom lines) for letter formation.

How would you respond to the feedback project forward?

b)

11.2.3 Identify Site Look and Feel

How would you best walk the client thro
Web site?

a)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

How would you respond to the feedback that moves the project forward?

b)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

11.2.4 Create Finalized Graphics

What project tasks need to be complete
created?

a)

What kinds of issues, inherent to Web te
consider when creating the finalized grap

b)

Lab 11.2 Exercise Answers

This section gives you some suggested answers to the questions in [Lab 11.2](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

11.2.1 Answers

Interview a friend or relative who
or her answers to the The Big Ho

a)

The project manager is almost always from the client company. This is a common problem in many industries and understanding the challenges helps to overcome these issues. It's only by listening to this company's message that the project manager can have a good idea to get to know the people involved. It begins to have a face on it as you become successful. If you are not becoming successful, refer them to another firm or to a

Answer:

By asking these questions, you will develop a primary and secondary marketing message that is better.

Write a creative brief for the product.

b)

Answer:

The following is a sample creative brief to address the issues discussed in the Big House.

A large, empty rectangular box with a double-line border, occupying the lower half of the page. It is intended for a creative brief.

Acme Communications Creative Brief

Project Mission Statement

To establish Acme Communications.com, a telecommunications, Web design, and Internet access provider, as the total communications solution. This Web site is being used not only to attract consumers but also agents interested in selling Acme Communications' products and services, as well as investors. The Web site must generate excitement about the Acme Communications solution and establish credibility with all constituencies.

Site Overview

In order to make Acme Communications.com a fully functional informational and transaction-producing conduit, the following areas will need to be addressed:

- A snappy informational area used to attract new customers. This area must inspire confidence in Acme Communications' services, motivating users to manage and present their businesses in the same exciting way through Acme Communications.
- A simple, e-commerce enabled facility that will allow customers to view Acme Communications' catalog, sign up for goods and

services on-line, and submit a credit application.

- A secure area that can be used by sales representatives to input and track customer orders.
- An informational area used to attract vendors and agents. Again, the credibility of Acme Communications' business objective must be emphasized, motivating individuals to adopt Acme Communications as a viable, profit-generating sales program.

Audience

Acme Communications should attract decision makers for businesses of all sizes. Specific products will be

targeted to small, midsize, and large entities. Acme Communications should also attract job seekers in search of a credible product to agent. Also, Acme Communications should attract investors based on its innovative approach to the communications market.

Creative Development

Web Kahunas will begin addressing Acme Communications' need for an effective graphical presentation by developing three to five composites for review.

Acme Communications specializes in communications. Thus, a professional look and feel must be created, which might appeal to business owners who wish to establish their own cyberpresence. Communications and corporate environment images

should be incorporated into the site. The following sites, 2323.com, 5656.com, and 7878.com, were mentioned as having a desirable look and feel.

Acme Communications has indicated a inclination toward a photo collage, which will incorporate communications and business images, along with subtle images like money, etc.

Web Kahunas will develop at least three composites and present them to Acme Communications by (insert date here).

After developing the overall look and feel of the site, Web Kahunas will consult with Acme Communications to develop secondary graphics that enforce the message in the various sections of the site. Graphics should

be used judiciously, having a distinct purpose, as they slow page-loading time. All graphics will be saved in a low-resolution format.

Content Development

Web Kahunas will consult with Acme Communications as copy for all of the products and services will need to be supplied by (insert date here) in order to incorporate this information into the Acme Communications Web site. Other required information will include investor, initial promotion, and agent copy.

11.2.2 Answers

How would you best present a cr

a)

A lot depends on the client's style. A lot of time in face-to-face meetings that never go anywhere in these situations. However, if this is the client remotely, nothing beats a client can see your facial expressions and misinterpretation. If you go to see organized, and well prepared, it a material that you are presenting. You should take the effort to present for the client to misinterpret the project.

If it's possible, fax specifications, materials to the client the day before review them for the meeting.

How would you respond to the feedback and move the project forward?

b)

*At this point, quite honestly, the t
composites. You are only dealing
something that is technically imp
budget, you should be open to inc
client.*

Answer:

*Remember, it is also important to
the time where the client should l
issue keeps getting revisited, it w*

organize himself or herself.

11.2.3 Answers

How would you best walk the client Web site?

a)

By this point, you have already started to build trust with the client. Now the client needs to see some evidence of your work. Show the client with three to five compositions that have been communicated to you.

The composites are just ideas. You load quickly or incorporate JavaScript needs to see how the page layout color and navigation. Once there a creative direction can be refined so be built on the last refined compo

Again, sometimes clients get cau

Answer:

*It's always a good idea to remind
implemented in the future. In fact
to present a fresh design every few
keep interest alive.*

How would you respond to the feedback
that moves the project forward?

b)

The key to good composite work is not putting as little work into each one, but putting a lot of different ideas so that they come from different places. From there, a graphic designer can give the client instructions. However, if a graphic designer creates a composite and the client rejects it, the designer loses in wages, a day in the graphic process, and an opportunity to give the client a better result.

Answer: *So when soliciting feedback from a client, the designer has been given enough ideas, including a good one, then it's fair to ask the client to wait for a final decision. If given. Some clients might ask for a second composite, but it becomes unprofitable or the schedule becomes into an unreasonable situation, it's better to end the project.*

Unfortunately, defining the creative process for a client/firm fit is a good one.

11.2.4 Answers

What project tasks need to be co created?

a)

Make sure that the hierarchy is correct. You need this to design the front page. Sometimes what seems like a simple design becomes a finalized design. So it's best to make a mockup before the graphic design. Graphics.

Answer: *Some graphic designers would like to design the page layout around it. However, it often has several modifications. Sometimes the client needs time to design around content until near the end of the manager can implement plans for freezes.*

What kinds of issues, inherent to

consider when creating the finaliz

b)

LOAD TIME! LOAD TIME! LOAD TIME!

Your graphic designer can make the page look great in the Web browser. However, if it takes

*it's no good. The graphic designer
RGB (red, green, blue) format and
there is a big image that resides (*
several images and hung together
cell padding.

*Also, mission-critical graphical fea
multimedia have to have a cross-
wonderfully the comet whoosh is
if only 5% of the Web community*

Lab 11.2 Self-Review Questions

In order to test your progress,
you should be able to answer
the following questions:

(True/False) A creative spec addresses the following issues:

1. _____ Written copy for the Web site

- 1)
- _____ Web site marketing messages
 - _____ Client's concerns about moving the project forward

(True/False) If you are working remotely and cannot meet with the client face to face, which of the following is the best option for communicating with the client?

1. _____ E-mail

- 2)
- _____ Bulletin board on the project tracking site

- _____ Regularly scheduled conference calls

The following multimedia features are cross-platform:

3) 1. _____ Flash

- _____ Shockwave
- _____ Quick-time movies

Lab 11.3: Writing and Editing

Lab Objectives:

After this lab, you will be able to

- [Oversee Writing](#)
- [Oversee Editing](#)
- [Oversee Proofing](#)

Writing for the Web on the top level is similar to writing for the print medium. The point needs to be made quickly and precisely. Longer content can reside on the site as the user scrolls. The luxury exists to include longer, detailed content and to look for it.

Users have a very short attention span. How to answer their questions. This is where the web has greater flexibility than radio, television, or print. Through site information, bookmark the site.

without the limits of time or print space.

When planning content for a Web site, ask for the first ten seconds, then the first thirty seconds on the front page. After that, keep in mind such a way that the user only has to scroll of navigation increases the usefulness of a planned in such a way that it can be easily causes vertigo.

In the beginning, before Web editors had spell checking and grammatical mistakes. One way to allow a misspelling on their Web site. Not certainly less need for proofreading. However, someone proof the site, before it goes live, Web editor is no smarter than the spell checker can both pass!

Let's take a look at how we can best manage our site.

Lab 11.3 Exercises

11.3.1 Oversee Writing

Who should write content for the Web s

a)

What is meant by a "content freeze"? W

b)

11.3.2 Oversee Editing

Which sites might you use as style guides?

a)

Name two writing tips that are mentioned
addressed in this lab.

Handwriting practice lines (10 sets of three horizontal lines).

b)

Handwriting practice lines (3 sets of three horizontal lines).

11.3.3 Oversee Proofing

Which skill sets might come in handy for

a)

Which member of the firm might you as

b)

Lab 11.3 Exercise Answers

This section gives you some suggested answers and discussion related to those answers. Please

questions at the companion Web site for the
<http://www.phptr.com/phptrinteractive>.

11.3.1 Answers

Who should write content for the

a)

One of the difficulties in doing graphics is to try to interpret a vision that the client sees on the screen. Clients are generally not good at drawing ready graphics and a template for them to use in trying to define this vision.

In the case of written copy, though, the client can best provide a written deliverable. The client can best provide

Answer:

convey in the Web site. The Web communicate these messages.

I'm always a little leery of a cont donate the time necessary to wri the Web firm.

What is meant by a "content free

b)

A content freeze is a deadline when a project manager needs to implement changes. After this point, programmers for embedding into the system change copy too many times after the deadline becomes expensive to change because of the programmer.

Answer:

11.3.2 Answers

Which sites might you use as style guides?

a)



Sun Microsystems: Writing on

Answer:

<http://www.sun.com/980713>

W3C Style Guide for Online Hypertext

<http://www.w3.org/Provider/Style/Overview>

The Web Developer's Virtual Library: Writing

<http://wdvl.com/Internet/Writing/>

There are many others, but these links are

11.3.3 Answers

Which skill sets might come in har

Handwriting practice lines consisting of 10 sets of three horizontal lines (top, middle dashed, bottom).

a)

Handwriting practice lines consisting of two sets of three horizontal lines (top, middle dashed, bottom).

[illegible]

- *Thorough understanding of I*

- *Excellent command of written English*
- *Strict attention to detail*

Answer:

- *No previous involvement in production*
- *Ability to work quickly, as per the production schedule, and*

Which member of the firm might you

b)

Answer:

We have a legal secretary on staff who handles all legal documents. She usually does not get involved with the Web site. Rather, she handles the legal functions of the firm. Because she is looking at things from a legal perspective and will see things that we, every day, can become blind to, she

Lab 11.3 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) The following writing techniques can work well on the Web:

1) **1. _____ Exciting advertising and promotional messages**

- _____ Friendly, casual tone
- _____ Use of headlines

(True/False) The Web firm should involve itself in

2) **1. _____ Writing content**

- _____ Editing content
- _____ Proofing content

Chapter 11: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

If your client does need help writing the

1) Web site, how should your firm respond?

2) How might you respond to a client who is constantly changing text and is unaware of the havoc this is causing for the production team?

Chapter 12.

Technical Development



"A pioneer is the guy lying in the mud with an arrow in his back."

Unknown

Chapter Objectives:

In this chapter, you will learn about

✓ Hardware/Software Requirements

✓ Technical Brief

✓ Programming and Testing

You might feel that the quote chosen for this chapter seems a bit odd, given that many Web developers see themselves on the cutting edge of technology. E-commerce is no longer a sexy buzzword but is rather a conduit for social and economic change. As a result, more

people sign up for dial-up accounts to buy their groceries and do their banking every day. These users are investing in high-speed modems and installing the latest browsers, giving Web developers more flexibility to build applications using newer multimedia capabilities.

However, three years ago, how many users would have easy access to sites running Flash and Shockwave applications? Not many. Shockwave required the user to visit the Macromedia site to obtain a

plug-in for the browser. How many people could one realistically expect to reach using this application? If there's an interruption in the distribution of said message, most likely the message isn't going to be delivered to anyone but the most determined visitor.

Nowadays, more Web sites are coded using Flash, Shockwave, Real Audio, and Real Video capabilities. All of these tools can be used to send a message to a large audience, because the audience has come up to

speed. The latest Microsoft and Netscape browsers intrinsically support many of these newer tools without requiring the user to get a plug-in.

Web developers, who expected to deliver their clients' messages to the world at large using one of the aforementioned tools in 1996, without providing an easy alternative distribution channel, were truly pioneers.

I don't have to make the first wave. I'd rather make it to Oregon. Most of the time, I'm

on a limited budget and don't have too many oxen to lose along the way. I have always preferred to take my time reading the map, arriving later, and thus stepping over the bodies in the mud.

While e-commerce is not news to many Web developers, it is only recently that Web firms are getting called to deliver these types of Web sites on a highly consistent basis. My firm had the capability two years ago to build e-commerce Web sites, but I often wondered why we didn't have more requests

to build them. Now, just about every Web site that we contract is e-commerce enabled. Yes, the technology was sound and in place two years ago, but the premise had not reached the public imagination as a viable business plan until recently. Sometimes it isn't even a matter of whether the public is technically ready for an idea but whether it is psychologically ready.

A realistic example may be Disabilitynews.net. When Disabilitynews.net was first on the drawing board, the project

manager had to assess exactly who his audience might be. The Web site needed to be viewable by health care professionals, families, and people with disabilities.

Disabilitynews.net wanted to provide an ability to purchase journal articles and related books through its Web site. A few years ago, there might not have been enough families or physicians online to support such a specialized e-commerce endeavor. Now demographics show that there would be enough audience members to

support Disabilitynews.net's e-commerce effort.

Using another example from Disabilitynews.net, we determined that to serve the visually disabled audience, frames could not be used. The most common Web browser tool used by vision-impaired people reads the text aloud to the user. However, it could not yet deal with frames effectively, and all of the images had to have alternative tags, so that the browser could read a description from any pictures used in the Web site. All of this

may not seem like a big deal, but if a vision-impaired user came upon Disabilitynews.net and is not accommodated, this experience would directly impact upon the message Disabilitynews.net wishes to convey. Its main goal of being an informational clearinghouse and community-building mechanism for people with disabilities, their families, and health care providers would not be met. It would have already locked one constituency out of the community. A little thoughtful planning while

putting together a technical brief avoids this.

In the excitement of making a Web site and working with new media, it is easy for people's expectations to get off track. The project manager must work with the client company to educate them about making sound choices for the technology at hand rather than developing fancy bells and whistles, which bog the message down because of their inability to deliver en masse. In the case of Disabilitynews.net, the use of a fairly common Web

site device frames would undermine its message. The project manager was able to foresee this before it became a problem.

As developers, we can envision the day when we can punch in the name of an old 1960s television series, name the exact episode that we want to view, and have that show delivered right to our computer screen on demand. Right now, only video clips lasting a minute or two are working well over the Web. Any clip longer than that requires a cable

modem, T1, ISDN, or DSL connection to work efficiently. In magazines and on television, mention is made of Internet teleconferencing as though it's a widespread phenomenon. Still, how many users actually have the cameras hooked up to their computers? These are all applications of the Web that seem viable today, but are we really there yet? In most cases, no.

The smart Web firm must underpromise and overdeliver, making the best use of tried and true methods to

successfully develop a client company's Web vision.

Lab Objectives:

After this lab, you will be able to

- [Identify Server Requirements](#)
- [Identify Connection Requirements](#)
- [Identify Operating System](#)
- [Identify Middleware Requirements](#)
- [Identify User Requirements](#)

I often open my Web Project Management North Andover, Massachusetts, with two st you are already familiar with. It opens [Chap](#) on the wall of my dorm room when I was a "The road is not always to the swift, but to The other is purely personal reflection:

"I have made mistakes. I am not proud. I vavow any knowledge of said mistakes, your involvement at Merrimack College, should adorns the walls of this room. This presentation will se

Like most people, I probably have learned r successes. One of my more important non database that my company built for a large area. I was very anxious to impress my ne Web site. So the software architecture of tl and I enthusiastically coded SQL statement much about my coding hours as I was inter portfolio sites for my company. However, a software requirements, I didn't spend enou foreign concept called the "RAID System." (of independent disks.)

My education began one spring morning wr and I kept getting errors. When I called the that the hard drive on the server had crash worked on. However, all of the sites on tha that. After all, computers went down end down time stretched into the afternoon and

clients were wondering where their Web site

When my associate and I had gone in to pitch, I suggested hosting the site off site, even though I had them readily available to use to host a site while subcontracting on another Web site, I was on a particular server. It was all set up with what I wanted and would make for rapid deployment. My associate graciously went along with me.

When the server hiccuped, I found out more about server hardware configurations, RAID

For my clients, this was a big issue. After all, their clients would find it odd that their Web site was not functioning perfectly. It would be a poor reflection gone along with my idea of hosting it outside. It was not their first choice.

Apparently, my server choice did not have a backup when the hard drive crashed, the server administrator quickly, reducing the amount of necessary,

As a programmer, I was crushed that my host

clients to see. As a project manager, I kicked them out. I didn't know about this? Already too many hours taken out of my Web site, hours that could not be billed, and I was feeling pretty upsetting, I let an important client down. The Web site not remain on this server. However, I would have to assume the burden of building a new box that could handle the code that I had a long history with them.

Luckily, the people involved at the client side had set up their own box, had the operating system installed and co-located it with an ISP. I made the move of the UNIX-based database to run on the new box. It was a relief that I had run into nice people. They were helpful and I happen to buy all of my computers from them. I was clients, but because in dealing with them, I learned a lot about what they sell.

This is a dark project management story where I made a mistake, I do try to "keep on running," as they say, until the project until it finishes successfully. However, I don't expect that a client is going to help solve all of my problems. If one's expertise is in coding, one must come up with a good understanding the hardware side and vice versa.

other, as I found out.

Lab 12.1 Exercises

12.1.1 Identify Server Requirements

Define a RAID system. What are the benefits and drawbacks of RAID?
What are the benefits and drawbacks of RAID?

a)

Determine the hardware configuration for

b)

12.1.2 Identify Connectivity

What is referred to as a "pipeline" or "pi
examples of several acceptable pipeline

a)

Describe how connectivity redundancy ϵ

b)

12.1.3 Identify Operating Sys

You are building an online store. Describe the platform as a foundation for development

a)

As in [12.1.3a](#), describe the benefits of u
online store.

b)

12.1.4 Identify Middleware R

Middleware is a software application tha
for developing databases and online sto
NT-based online store middleware and it

a)

Give several examples of UNIX-based m
used in the development of an online sto

b)

[illegible]

12.1.5 Identify User Requirements

You are developing an online store that allows users to purchase t-shirts, bags, and other products featuring the company logo on it. Employees will access the store through the company intranet. How will this impact the way you deliver content?

a)

What kinds of user requirements might a law firm's static brochureware Web sit

b)

Lab 12.1 Exercise Answers

This section gives you some suggested answers to the questions in [12.1](#) with discussion related to those answers. You can find the complete answers to these questions at the companion website located at <http://www.phptr.com/phptrinte>

12.1.1 Answers

Define a RAID system. What are the advantages of a RAID system in place on a server?

a)

The following information was found at <http://webopedia.internet.com>
explanations for current technical

A server's ability to deal with a situation called "fault tolerance." A RAID (Redundant Array of Independent **Answer:** disks) System is one mechanism for fault tolerance. RAID systems are designed to provide data protection:

Level 0: Data striping (blocks of data are spread across multiple disks) but no redundancy. Improves server performance, but does not protect data.

Level 1: Provides disk mirroring, which is the duplication of data on two disks. Both disks are kept up to date. Should the primary disk fail, the secondary disk is instantly activated, thus insuring there will be no data loss.

Level 3: Provides the same level of protection as Level 1, but with error correction data. This level is not commonly used.

Level 5: Data striping at the byte level and parity. This level is commonly used for file servers.

information. Again, this provides better ser of fault tolerance.

When launching an online store and/or data server, I would most prefer a server using

There are other more expensive options, su RAID Level 1, where disks are mirrored, wi server is duplicated by a back-up server, re primary one fail.

12.1.2 Answers

What is referred to as a "pipeline"

examples of several acceptable p

a)

The terms "pipe" or "pipeline" are server's connection to an Internet or MCI.

A T1 line transfers data at a rate move data at 44.7 Mbps.

Most ISP servers are connected to a combination of T1 and T3 lines, and backbone providers. The reason that a T1 line becomes inoperable or goes down, there is another connection for traffic. As a developer, depending on the traffic, you may want to see two T1 lines to Internet backbone providers.

Many medium-sized ISPs use two connections to backbone providers.

Describe how connectivity redundancy improves performance.

Answer:

b)

If an ISP's pipeline includes only a backbone provider, should anything be done or the backbone provider, the ISP process requests. Therefore, reduce the size of the ISP, the system and whether the current server connects

Answer:

traffic effectively, should one consider a different configuration, albeit not the least T1 or T3 connections, preferably systems (e.g., Bell Atlantic or Sprint) or Internet backbone providers. This is a good way of keeping any connectivity problem

12.1.3 Answers

You are building an online store. Do you want to use a NT platform as a foundation for development?

a)

If the client isn't too choosy about platform, using Microsoft program foundation for rapid application development trained to update his or her site using Front Page and, if the site has been Server Commerce Edition, has the inventory on the fly. The development of an online store such as this, barring the programming code functions, compared to developing a similar

Answer:

As in [12.1.3a](#), describe the benefits of building an online store.

b)

UNIX allows developers direct access to the system. In an NT environment, I always work through a veil, that I'm unable to see what my programming code will function on. If you have built Web sites in Front Page versus a real Web editor, you will understand why. In a real Web editor, the developer can control the look, whereas Front Page sometimes does not.

Answer: *Therefore, after having used both platforms, I would use a UNIX platform if the client's requirements differ substantially from what can be achieved by wizards in the Microsoft products.*

Also, UNIX provides a more secure environment.

*especially important as a foundation for security.
Unfortunately, there are still security concerns with the
updated version of NT. Therefore, the trade-off is
functionality versus flexibility versus security.*

12.1.4 Answers

Middleware is a software application that provides a common environment for developing data-based applications. It provides several examples of NT-based on capabilities.

a)

Middleware products used in the (

Answer: *the NT platform include Microsoft SQL Server, and Oracle.*

Give several examples of UNIX-based
could be used in the development

b)

Answer:

MySQL and Oracle can be used as UNIX-based online stores. Grantees do not support wizardlike rapid application development. Therefore, the use of them on UNIX is not recommended.

12.1.5 Answers

You are developing an online store with access to purchase t-shirts, bags, and hats with the company logo on it. Employees will be able to access the store through the company intranet. How would you use the programming tools used to deliver

a)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Developing applications on an internet environment. Most users will be a similar software and hardware configuration. The developer needs to determine if the applications are configured and then build the applications.

Answer: *is cross-platform for those users.*

For a Web site that is accessible to all users, the developer needs to build it in such a way that all browsers can be accommodated. Developing this type of cross-platform access is a challenge.

What kinds of user requirements are involved in the development of a law firm's static website?

b)

*I would consider whether the law,
If the firm did provide these type
should be accessible by visually if
the pages are static, our only con
ternate descriptions for the image
Web site.*

Answer:

Lab 12.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) Developers should consider the following issues when deciding where to host a web site.

1. **_____ The hosting cost is competitive with other Web hosting companies offering the same services.**

1)

- _____ The Web hosting company is running the middleware and operating system necessary to fulfill the technical requirements of the contract.
- _____ The hosting company has redundant connections to the Internet.

(True/False) Client budget would affect the following:

1. _____ Choice of operating system

2)

- _____ Choice of server hardware configuration
- _____ Programming flexibility

Lab Objectives:

After this lab, you will be able to:

- [Write Programming Plan](#)
- [Write Test Plan](#)
- [Invite Client Feedback](#)

A programming plan is an internal document used by the project team, based upon the described functionality in the project specification. One might not wish to confuse the client with highly detailed references

to database middleware in the project specification, but these facts are important to all of the programmers working on the Web site. A programming plan can be drafted as an internal tool to fill the gaps between the project specification, which must be signed off and understood by the client, and the information necessary to convey to the programmers. For example, it may be necessary that the ASP programmers not use cookies to facilitate the operation of an online store because of

incompatibility with earlier forms of Netscape browsers. The client needs to know that the Web site will be cross-platform; however, discussion of "cookies" may mean nothing to them besides confusion.

On another front, the programming plan is important because if any of the work has been subcontracted and does not meet the requirements, this is the document to which the contracting Web firm can refer, should the subcontractor be called upon to make corrections.

A testing plan is a formalized document that discusses the testing of the functionality of the Web site. People testing a Web site are charged with two objectives:

- Try to break it by using unexpected input, making sure that all error messages work as they should.
- Make sure that the site functions as expected.

So, when testing a search page

that has the ability to search on several different parameters or only one, using an AND, LIKE, or OR criteria, some test criteria may be to test using numbers or the first letter of a matching word. It's best to use people who have not worked on the site and have very little knowledge of the way it is "supposed" to work. Otherwise, it's very easy to overlook problems due to a programmer's bias. It is similar to a writer trying to edit his or her own work. One cannot see the forest for the trees. The

main programmers are often too close to the situation to test the site with a fresh perspective.

Once in a great while, the most difficult part of the programming process is inviting client feedback. This is where the project meets the cold light of day. As in the creative side, it is so important that the technical team work with the client to define "Done." No project can be run successfully without an end point in sight, with specific requirements to be fulfilled.

It's funny, because as I'm writing this book, I've run into several project management nightmares. I wish I could present case studies of circumstances that have happened to other people, but at least I have the ability to put these experiences into perspective and include my postproject nightmare reflections here.

Most of the problems that I run into have a very similar theme. The client's expectation does not match the contracting firm's view. In 90% of these

cases, with a little discussion and brainstorming, both parties can come to a mutual agreement. The Web firm may need to give a little and the client may need to adjust a little. In 10% of these cases, the rejection of work does not have much to do with the work itself. The requirements have been met, everything is in place, but perhaps as a result of internal issues with the client, like inability to pay the final bill, they keep rejecting the work.

We found this to be true

recently when a client company kept rejecting the programming end of the Web site, saying that there were problems every time we approached them for the final payment. When we notified them that the programming was completed, we never received negative feedback; it was only when we kept trying to present them with the final bill that all of a sudden there was a huge laundry list.

Rejection number one came when the client wanted pieces of their online store done with

drop-down selections instead of the links that we provided. I considered that perhaps this was a stall tactic, but in thinking it over, I felt the best way to handle the situation was to charge the employee representing the client with "Defining Done." He sounded very clear, and he assured me that drop-down selections would finish the project. I wondered if somehow there had been a miscommunication, and in good faith, I decided to absorb the change, which was significant, costing another

\$1000 in programming hours. However, once this functionality was completed, we notified the client of completion, never heard from them, and then when the check was due, they complained that they didn't like how the drop-downs looked. In fact, not only did they not like how the drop-downs looked, but they had a lot of other issues with the site that had not been previously brought to our attention.

At this point, I was very angry, because I felt that the client was being uncooperative. As a

Web firm owner/project manager, it's easy to become emotional because you know how nonproductive and costly this behavior can be. To make matters worse, this scenario was coming on the heels of another much smaller consulting project, in which the firm had been quite rudely stiffed. Just recently, a client had contracted for a day's consulting time and some graphic work. He had signed a contract and knew how much it would cost. Then, after he received consulting and

development services, he told me that my time shouldn't be worth that much. My associates and I laughed about it afterward, knowing that he would certainly find out how mistaken he was with regard to Internet consulting/Web site development pricing. However, the levity at his expense did not take the sting out of his actions. Needless to say, when this next client payment issue arose so quickly on a much bigger account, I did not have a great deal of patience for it. Still, I was determined to keep

a cool head. If I was upset and could not interface well with the client at certain points, I would defer to colleagues, who were not as emotionally invested.

We had completed all of the requirements, had documentation to back up all of our conversations with this company, and these folks just would not pay us, saying once again that they required changes. I backed off, saying that we would accept three-quarters of the final payment, the other one-quarter due upon

completing a list of small cosmetic changes. However, I told the client representative that we would not even look at the punch list until this partial payment was received because we felt that there had been a breach of contract. Our contract requires that a client review creative and technical Web site initiatives completed on their behalf and provide feedback on a timely basis. This had not been happening to my satisfaction.

It took an entire day to reach this company. We walked them

through the Web site and waded through a bevy of excuses as to why they couldn't talk to us. We listened to how the contact people had been out of the office and had not received our messages. As we continually barraged them with phone calls, their resolve began to weaken. At 4:45 P.M., I got the truth. The reason why we weren't being paid didn't have anything to do with us at all. The owner was wanted for violating a restraining order taken out against him by an old girlfriend. He was avoiding

arrest on that particular day. However, these people representing him would have had us doing cartwheels under the guise that our work was not acceptable. I maintained my stance that we had asked them to define "Done" and we had delivered. Then I informed them that Web site would be coming down from the staging server by 5:00 P.M. that evening. They would be charged a \$500 reimplementation fee should they want to put it back up, and if I still didn't receive

payment within five business days, I would be filing a lawsuit against them for the outstanding balance. The young secretary finally cracked and told me what was going on.

Should it have gone that far? Absolutely not. There had been plenty of signs, which would have motivated a savvy project manager to cut losses and exit the project before any additional resources were used.

First, the client had shown all the signs of someone that would be difficult to work with.

He seemed agitated in the first meeting and unable to focus. His broad statements that he could "get us so much business" put me off right away. Whenever anyone says this to me, it always raises a red flag. Usually they want us to cut them a deal, and I know, from experience, that this type of person will rarely deliver any viable business to our firm. It's a smoke screen. However, I felt the site seemed very straightforward, and we would be interacting with his employees, who seemed to be

much more focused.

Next, it was sticky getting the deposit money from him. This is always an important sign. If someone graciously and promptly writes the first check, chances are they won't be terribly difficult about the last one. We had to keep after him for a week to get the deposit money to us.

Then, when we showed him the first iteration of the Web site, he never provided feedback. When we later asked for payment, he was so irrational

on the phone that he let one of his employees explain why his boss was unsatisfied.

I was inclined to cut my losses and exit at this point. However, we did not have a formal project spec. He had shown us a Web site that he wanted his new site to function like, and I felt the requirements were clear. The client was in an extreme hurry to get a new site up and running as he felt that his old one was costing him money. I felt that he would be motivated to get the new site live and not hinder the process

in any way. In fact, in the beginning of the project, his secretary called us daily, pressuring us to hurry. Therefore, we skipped some of the important documentation steps.

Given the fact that we did not have a formal project spec, which the client had signed off on, I felt obliged to try to fix any discrepancies that were identified in this conversation, although not without forcing the client to define "Done." When his definition still did not constitute "Done," I felt that

something was definitely fishy.

Did I initially break every project management rule in this book? Yes. I didn't screen the client. I didn't prepare formalized specifications for the client to sign off on. Therefore, I got too far into the project too quickly, with too many expenses to back out easily. I allowed myself to be pressured and led. Having had plenty of experience with identifying and understanding client side project warning signs, I reacted to none of them.

I must say that 95% of our clients are delightful to deal with. I doubt there is a criminal record among them, and most behave with the utmost professionalism. We are extremely lucky in this sense. However, any business has to insulate itself against clients who are experiencing internal difficulties and expect the firm to bear the burden.

If this client had only been up front and had told us of their need to exit or postpone the project, we would have respectfully facilitated this

eventuality. However, I felt that the client took an aggressive and damaging stance, like the bully in the playground, pushing us down before we could pick up the ball and run with it.

Did I learn from this experience? Absolutely. I learned that my business instincts could be trusted more often than not. Sometimes we just don't trust our inner voice. We try to tell ourselves that it isn't logical to base actions on "a bad feeling." I also changed our payment terms from half

the project estimate due at contract signing and the other half due upon completion to half the project estimate due at contract signing and half due when the project is halfway complete. Most important, I set up a more structured project process. From that point on, every client would receive a client packet in the first two weeks of a project, before anyone touched a keyboard. No exceptions, no matter how much of a hurry they were in. Client packets include the following:

- *Work order.* An initial inventory of programming services requested, the estimated delivery date, and the terms of payment.
- *Programming services agreement.* The legal contract between the Web firm and the client company.
- *Schedule.* A detailed schedule of creative and technical deliverables. Clients should look to this schedule to determine

when client review will be required.

- *Approval letters.* Client approval is required for all phases of project development. The following client signoffs are requested before the firm moves to the next phase of project development:

- 1. *Receipt of project packet* to acknowledge receipt and review of the client packet.**

- *Project specification and site hierarchy approval* to acknowledge approval of detailed project requirements as defined by the project specification and site hierarchy.
- *Composite approval* to acknowledge which of three creative directions the client wishes to pursue, with any appropriate modifications, as defined in the project specification.
- *Graphic design approval*

to acknowledge approval of finalized graphic design.

- *Static page approval* to acknowledge approval of static Web pages (Web pages that do not provide dynamic content).
- *Dynamic functionality approval* to acknowledge approval of program functionality as defined in the project specification.
- *Receipt of training* to acknowledge receipt of on-

site training hours as defined in the project specification.

- *Stamped envelopes.* Provided for mailing approvals. However, in order facilitate rapid project deployment, clients can fax approvals, make copies for themselves, and mail the originals to the Web firm.
- *Acknowledgment of domain name and hosting arrangement.* Client will arrange for hosting and

domain name acquisition at the beginning of the Web site project. This form supplies hosting company information, user name and password selection, domain name (or IP address), and the name of a technical contact at the hosting company. This arrangement must be completed after the work order is signed and this acknowledgment forwarded to my company, Surf's Up Web Development, Inc.

- *Client questionnaire.* Copy of questionnaire completed previously before or during initial client interview.
- *Site hierarchy.* A flow chart of the proposed Web site architecture, as currently understood by the Web firm. The client is asked to review this hierarchy carefully, as graphics will be built based upon this design.
- *Project specification.* The project "bible," as the Web

firm currently understands the client requirements. The client is asked to review this specification very carefully, as it is used as the foundation on which the Web site will be built.

- *List of client deliverables.* This is a list of deliverables (i.e., written copy for static Web pages, photos, etc.) that are needed from the client before the Web site goes into the graphic design or static Web page build phase.

We also now formally describe to the client, in writing, what our production process is, and we formalize client approvals before moving to the next phase. Therefore, long after graphic design is complete and the firm is working on the programming, graphic design cannot be revisited without compensation. We send the client the following letter:

When considering the production process used to build your Web site, please review the following phased approach: Client action items are in **bold** text.

Analysis

Request for quote submitted to Surf's Up Web development

Client questionnaire and interview completed with client company

Surf's Up project team reviews RFQ for viability and drafts a bid

Bid accepted by client company and contracts signed

First half of project estimate now due

Surf's Up drafts a detailed project specification and site hierarchy

Project packet is sent for review to client company

Receipt due

Client arranges for hosting, registers domain name, and applies for Verisign/merchant accounts (if the Web site is e-commerce enabled)

Verification of hosting/domain name now due

Client provides feedback on project specification and site hierarchy. New documents, reflecting any feedback, are drafted by Surf's Up and approved by the client company
Review and approval due

Design

Three graphic composites are drafted by Surf's Up and submitted to the client company for review.

Client picks one composite and

provides feedback for any modifications.

Review and approval due

Web site graphic design is completed

Client reviews graphics, provides any feedback for modifications, and finalized graphics are built by Surf's Up and approved by client company.

Review and approval due

Last half of project estimate now due

Production

All deliverables on client deliverable list are now due

Static Web pages (pages that are not interactive) are completed,

embedding client text and any secondary graphics

Client reviews these pages, provides any feedback for modifications, and finalized static Web pages built by Surf's Up and approved by client company

Review and approval due

Dynamic content (i.e., database and e-commerce driven Web pages) are completed

Client reviews this functionality and provides feedback for modifications. Finalized dynamic content is built by Surf's Up and approved by client company

Review and approval due

Implementation

Web site is tested and proofread by Surf's Up

Training hours are provided, as defined in the project specification, to the client company

Receipt due

Web site is set live and submitted to seven major search engines

Lab 12.2 Exercises

12.2.1 Write Programming Plan

[illegible]

a)

What kinds of issues did you address in the project that you did not mention in the project statement?

b)

12.2.2 Write Test Plan

Write a test plan for the project used in []

a)

What kinds of errors would you hope thi

b)

12.2.3 Invite Client Feedback

Discuss how you would walk a client through this functionality.

a)

Which kinds of points must be documented
feedback properly?

b)

Lab 12.2 Exercise

Answers

This section gives you some suggested answers to the questions in [Lab 12.2](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

12.2.1 Answers

Write a programming plan for the

[illegible]

a)

*The following was the technical d
specification:*

Technical De

This site will be built utilizing HTML end, and possibly Java and JavaS include UNIX platform, Perl 5.0, n

Front Page extentions are *not* ne to install the site on the server o hosting company. Another future located in Anytown, MA.

A UNIX platform provides for gre

than the NT platform and is the a
this type. HTML will be used to co
Perl will be utilized in conjunction
end to build the Acme database a
functions. JavaScript and Java ap
more interactive graphical preser

This site will be best viewed in Ne
Internet Explorer 3.0 and above.

Database Fi

Two database tables will track jol
information. Both tables will need
interface (i.e., Position AND Salar
singular criteria (i.e., Geography)
detailed resume and complete jo
files will be uploaded to the serve
number that mirrors the Access c
interoffice.

A separate database table will tra

with their user names and passw

Job Seek

This table will be password protected. Passwords will be assigned to authorized users to view its contents.

TABLE RESUME FIELDS

id, name, contact_person, current_location-desired, desired_position

The id number will link to a separate text file containing the candidate's resume. Administrators at Acme will need to verify current company information from the resume before uploading them.

Name will be a "hidden" field not included as an administrative background check. Interoffice numbering scheme follows

This table will be searchable by skill and desired-position by the user. id, skills, salary, location-desired, the administrative back room.

"Hits", which bring up candidates company that is searching the data shown.

Job Postings

TABLE JOB FIELDS

id, company, contact_person, skills, location, position, date

The id number will link to a separate text file containing the company's posting. Administrators at Acme can view information from the job postings.

Answer:

Company will be a "hidden" field and will not be included as an administrative field. The interoffice numbering scheme follows the format:

This table will be searchable by state, geographical location and position. It will also be searchable by company, id, skills, and position through the administrative interface.

Records should be automatically deleted for users residing there for over thirty days.

User Name/Password

TABLE USER FIELDS

user_name, password, company

This table will be searchable by user name, password, and company.

An administrative back room will be provided to add, modify, delete, and the aforementioned fields.

Form

Two forms will reside on the site: either job seeker or job posting. The job seeker form will be e-mailed to Acme Personnel, who will then follow up with the prospective candidate.

The candidate form will first present a list of open positions, current role, skills, current company, and other information. Name, address, city, state, zip, phone, evening phone, and e-mail will be required.

The job posting form will include a description of the position, address, city, state, zip, phone, fax, e-mail, and salary range.

The programming plan must include a detailed description of how to drive this functionality, their model of development, and other considerations that might impact the implementation. The plan should provide cross-platform functional

A programming plan for one of them might look like the following:

Acme Personnel Web Site Program

Based upon the requirements described in the specification, this program allows users to post to a posting database.

The search functionality must include the following conditions. A form must first be built that includes a text field for skills, drop-down choices for geographical location, drop-down choices for positions, and two text fields for salary 1.

Drop-down choices for the location must include South Shore, 128 West, 495 North, and Greater Boston.

Drop-down choices for the position must include Administrator, C++ Programmer,

Engineer.

Variables will be passed to the cgi using the cgi-lib.pl library.

First, the program must determine the search criteria.

If several criteria are used, the algorithm program will be that each criteria parameters with an AND statement.

The other search statements, defined and passed, include

Skills LIKE function

Salary Two fields will be input, for

geographical-location Drop-

down input facilitates =
function

position Drop-down input
facilitates = function

If there are search results, the user should be directed to an output page, `seektrue.cgi`, containing the information. If there are no search results, there should be a program, `seekfalse.cgi`, sending a message to the screen informing the user that there has been a null result, and giving the user a link back to

the search page to try their search again.

Error messages should occur if

Character strings are
input into the salary fields

There is no search criteria
input

b)

What kinds of issues did you address in the programming plan that you did not mention in the project specification?





Answer:

In this section of the programming plan, query structure was addressed, discussing which criteria would be attached to which field (i.e., Skills is a "LIKE", Salary is handled as a "BETWEEN", etc.). In addition, error conditions are addressed.

Perl coding will use the cgi-lib.pl library. This would not mean

anything to the client.

However, in order to maintain programming consistency, it is important to the programming team.

Programming code has to determine which fields are being used as search criteria. From there, a query statement can be constructed.

12.2.2 Answers

Write a test plan for the project u

a)

This image shows a blank sheet of white paper designed for handwriting practice. It features ten evenly spaced, horizontal dashed lines that run across the width of the page. These lines are intended to guide the placement and height of letters as students write. The background is plain white, and there are no other markings or text on the page.

Answer:

The following conditions for seek.

Search using each individual se

Search using every combination of search criteria.

Enter character strings in the salary fields.

Enter no search criteria.

Test "LIKE" functionality by entering the beginning letter of a true result.

Verify search results containing correct output information.

b)

What kinds of errors would you hope this testing plan might identify?



Answer:

I would want the test plan to identify incorrect use of error messages and unreliable query results.

12.2.3 Answers

Discuss how you would walk a client through the functionality.

a)

The best way to walk a client through a meeting. If this is not a possibility, use a phone while the client is viewing the project manager.

If you are already into the technical side of things, that graphics and site layout have been done, is a database, test data should have been created. The project manager should test the Web site's functionality. The project manager should create scenarios to demonstrate to the client.

Answer:

Then the project manager should walk the client back room so that they may understand the project and deleted.

Lastly, invite the client to then click on the links and tell them that all of the links are working.

Which kinds of points must be done to ensure the feedback properly?

b)

Clients are usually concerned with requested and how that information description of the front-end intert

Answer: *must be included in the project s
interpretive programming plan. T
approved by the client; therefore,
contested by the client must be i*

Lab 12.2 Self-Review Questions

In order to test your progress, you should be able to answer

the following questions:

(True/False) The following issues would be typically addressed in the programming plan rather than the project specification:

1) 1. _____ **Sessions coded by ASP programmers might necessitate the use of cookies.**

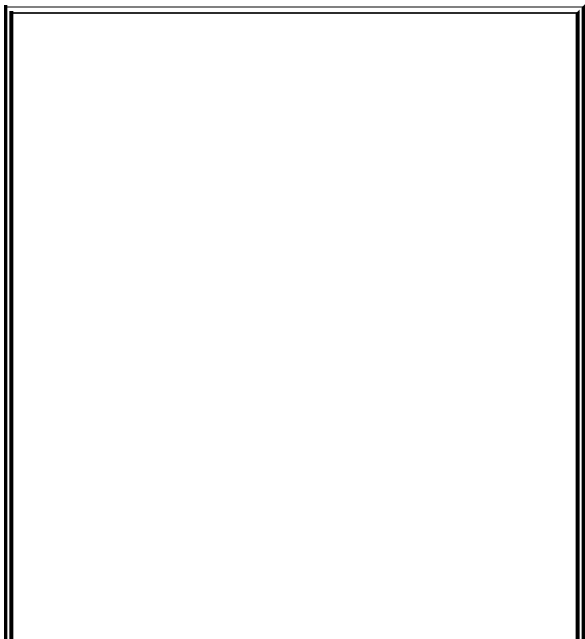
- _____ Perl 5.0 is the version of Perl used for the Web site.

(True/False) If a client contested the use of drop-down selections for their Web site, you would refer to which of the following documents?

2) 1. _____ **Project specification**

- _____ Creative brief
- _____ Programming plan
- _____ Test plan

Lab 12.3: Programming And Testing



Lab Objectives:

After this lab, you will be able to

- [Oversee Coding](#)
- [Oversee Testing](#)

While a project manager need not be a programming guru, it is very helpful to understand what programming languages can accomplish certain objectives. In my Web shop, we use Perl, ASP, and VBScript, to do mission-critical operations and Java Script to deploy

operations that enhance the graphics.

However, there are many Web programming languages and applications that can be used to bring a Web site to life.

The following article, "[Characteristics of Web Programming Languages](#)," is written by Steve Ford, David Wells, and Nancy Wells, of Object Services and Consulting, Inc. [*] While it does not cover some of the newer tools, like ASP and Flash (the article was written in 1996 and updated in

1997), Steve, David, and Nancy have put together an excellent resource for the project manager. We will research some of the newer programming tools later in this lab.

[*] Published on Object Services and Consulting, Inc's Web site

www.objs.com/survey/lang.htm

Characteristics



Characteristics of Web Programming Languages

Just as there is a diversity of programming languages available and suitable for conventional programming tasks, there is a diversity of languages available and suitable for Web programming. There is no reason to believe that any one language will completely monopolize the Web programming scene, although the varying availability and suitability of the current offerings is likely to favor some over others. Java is both available and generally suitable, but not all application developers are likely to prefer it over languages more similar to what they currently use, or, in the case of non-

programmers, over higher level languages and tools. This is OK because there is no real reason why we must converge on a single programming language for the Web any more than we must converge on a single programming language in any other domain.

The Web does, however, place some specific constraints on our choices: the ability to deal with a variety of protocols and formats (e.g. graphics) and programming tasks; performance (both speed and size); safety; platform independence; protection of intellectual property; and the basic ability to deal with other Web tools and languages. These issues are not independent of one another. A choice which seemingly is optimal in one dimension may be sub-optimal or worse in another.

Formats and protocols. The wide variety of computing, display, and software platforms found among clients necessitates a strategy in which the client plays a major role in the decision about how to process and/or display retrieved information, or in which servers must be capable of driving these activities on all potential clients. Since the latter is not practical, a suite of Web protocols covering addressing conventions, presentation formats, and handling of foreign formats has been created to allow interoperability [Berners-Lee, CACM, Aug. 1994].

HTML (HyperText Markup Language) is the basic language understood by all WWW (World Wide Web) clients. Unmodified HTML can execute on a PC under Windows or OS/2, on a Mac, or on a Unix workstation. HTML is simple enough that nearly anyone

can write an HTML document, and it seems almost everyone is doing so.

HTML was developed as part of the WWW at CERN by Tim Berners-Lee, who is now Director of the World Wide Web Consortium (W3C) at MIT's Laboratory for Computer Science. Refinement of HTML continues at W3C, with standardization via the Internet Engineering Task Force (IETF) of the Internet Society. HTML descended from SGML (Standard Generalized Markup Language), the ISO standard language for text. SGML is in widespread use by the US Government and the publishing industry for representing documents. HTML applies SGML principles to the WWW. As such, it implements a semantic subset of SGML with similar syntax.

HTML is a markup language rather than a complete programming language. An HTML document (program) is ASCII text with embedded instructions (markups) which affect the way the text is displayed. The basic model for HTML execution is to fetch a document by its name (e.g. URL), interpret the HTML and display the document, possibly fetching additional HTML documents in the process, and possibly leaving hot areas in the displayed document that, if selected by the user, can accept user input and/or cause additional HTML documents to be fetched by URL. HTML applications, or what we might consider the HTML equivalent of an application, consist of a collection of related Web pages managed by a single HTTP (HTTP is the tcp/ip protocol that defines the interaction

of WWW clients and servers) server. This is an oversimplification, but the model is simple, and the language is simple, and that is one of its strengths.

As HTML moves through the standardization process, and is extended by various vendors, it loses some of its simplicity, but it remains a useful language. The Web programmer generally finds HTML lacking in only two areas: its performance in certain types of applications, and the ability to program certain common tasks.

The remainder of the paper: (a) discusses the issues involved in meeting the performance and expressibility goals while still providing safety, platform independence, and the ability to interact with a variety of formats, protocols, tools, and

languages; (b) identifies design alternatives addressing these issues; and (c) discusses a variety of Web programming languages in this context.

Power. HTML is limited in its computational power. This is intentional in its design, as it prevents the execution of dangerous programs on the client machine. However, Web programmers, as they have become more sophisticated in their applications, have increasingly been hamstrung by these limits. Tasks unable to be coded in HTML must either be executed on the server in some other language, or on the client in a program in some other language downloaded from a server. Both solutions are awkward for the programmer, often produce a sub-optimal segmentation of an application across program modules,

both client and server, and reintroduce safety considerations.

Performance. Because of an HTML program's limited functionality, and the resulting shift of computational load to the server, certain types of applications perform poorly, especially in the context of clients connected to the Internet with rather low bandwidth dialup communications ($\leq 28.8\text{Kbps}$). The performance problems arise from two sources: (a) an application which is highly interactive requires frequently hitting the server across this low bandwidth line which can dramatically and, at times, unacceptably slow observed performance; and (b) requiring all computation to be done on the server increases the load on the server thereby reducing the observed performance of its clients.

Today, most users have pretty competent client machines which are capable of accepting a larger share of the computational load than HTML allows. For example, an Internet-based interactive game or simulation can be a frustrating experience for users with low speed connections, and can overwhelm the server that hosts it. If you were the developer of such a game, you'd be inclined to push more of the functionality to the client, but, since HTML limits the possibilities, another route to supporting computation on the client must be found. The developer might make an executable client program available to users, which would be invoked via the HTML browser, but users might only be willing to accept such programs if they trust the source (e.g. a major vendor), as such programs are a potential safety

concern. Also, users don't want to be continuously downloading client programs to be able to access Web pages, so this solution has real practical limitations considering the size and dynamism of the Web. If safe powerful high performance programs could be automatically downloaded to client platforms, in much the same way as HTML pages, the problem would be solved.

When code is to be executed on a client, there are two main considerations: what gets shipped and what gets executed. There are three main alternatives for each of these: source code, a partially compiled intermediate format (e.g. byte code), and binary code. Because compilation can take place on the client, what is shipped is not necessarily what is executed.

Byte code, according to measurements presented at the JavaOne conference can be 2–3x smaller than comparable binary code, so its transfer can be considerably faster; especially noticeable over low speed lines. Since transfer time is significant in the Web, this is a major advantage. Source code is also compact. Execution performance clearly favors binary code over byte code, and byte code over source code. In general, binary code executes 10–100 times faster than byte code. Most Java VM developers are developing JIT (Just In Time) compilers to get the benefits of byte code size and binary speed. Java byte codes are downloaded over the net and compiled to native binary on the local platform. The binary is then executed, and, possibly, cached for later executions.

It should be clear that any combination of these strategies could be used in the implementation of any particular Web programming language, and there is in fact wide variation among the systems actually surveyed.

Platform Independence Given the diversity of operating systems and hardware platforms currently in use on the Web, a great efficiency results from only dealing with a single form of an application. The success of HTML has proven this, and Java has seconded it. The ability to deliver a platform-independent application of great appeal to developers, who spend a large portion of their resources developing and maintaining versions of their products for the different hardware/software platform combinations. With Java, one set of sources and one byte compiled

executable, can be maintained for all hw/sw platforms.

While platform independence has long been a goal of language developers, the need to squeeze every last ounce of performance from software has often made this impractical to maintain, at least at the level of executable code. However, in the Web this concern becomes less important because transfer time is now a significant component of performance and can dominate execution time.

Platform independence can be achieved by shipping either byte code or source code. One advantage of shipping byte code over source code is that a plethora of source languages would require the client machines to maintain many compilers and/or interpreters for the source languages,

while fewer byte code formats would require fewer virtual machines.

Preserving intellectual property.

Although not currently discussed much as an issue, the ability to download safe, portable applets in some form less than source code is an additional advantage to developers who wish to protect their intellectual property. Looking at someone else's script or source to see how they do something and just tweaking it a little or copying a piece of it to do the same thing in one's own program doesn't feel like stealing. But if one has to go to the effort of reverse engineering byte or binary code, it becomes more obvious that this code is someone else's intellectual property. For the vast majority of honest people on the Web, this subtle reminder may be enough. For some of the minority,

the effort involved in reverse engineering may serve as a sufficient deterrent.

Safety. Viruses have proven that executing binary code acquired from an untrusted, or even moderately trusted, source is dangerous. Code that is downloaded or uploaded from random sites on the web should not be allowed to damage the user's local environment. Downloading binary code compiled from conventional languages is clearly unsafe, due to the power of the languages. Even if such languages were constrained to some ostensibly safe subset, there is no way to verify that only the safe subset was used or that the compiler used was trustworthy (after all, it is under someone else's control).

HTML proved that downloading

source code in a safe language and executing it with a trusted interpreter was safe. You can't infect a client with a virus by fetching and displaying an HTML document (although you certainly can fetch a file with a virus in it, which could then be activated by executing the file, something which is not supported directly by HTML, although some browsers allow it). HTML is not sufficiently powerful. A middle ground is being sought in which the downloaded program is less limited in its capabilities than HTML and more limited than a conventional language. Even though HTML has limited power, the general idea behind HTML, that of a somewhat limited language interpreted by a trusted client-side interpreter, has been widely adopted with more powerful languages and interpreters.

Some languages achieve relative safety by executing byte-code compiled programs in a relatively safe runtime environment (a virtual machine). Yet other languages are fully interpreted on the client by an interpreter provided by the language developer. In either case relative safety can be achieved because the interpreter or virtual machine can make safety checks that are impossible to make statically at compile-time. Note that safety can only be provided by the interpreter or virtual machine, not by the language or the language's compiler.

Building a secure virtual machine is a non-trivial task. Not many virtual machines are needed since a single virtual machine can be the target of many languages.

This is not to say that lack of safety

or platform-independence disqualify a language for a role in Web application development, but for dynamic applications likely to be downloaded from untrusted sources with current browsers and executed locally on mainstream platforms, a safe and platform independent executable is highly desirable. At the other extreme, the interpreters and runtimes that execute such programs are likely to be developed using unsafe languages and platform dependent executables will be distributed by their developers. For programs intended for execution on servers, there is some value to safety and platform independence, but not to the same degree as on clients.

Conclusions. HTML is proving insufficient by itself to develop the myriad Web-based applications

envisioned. As extended by server and client programs, the task is feasible, yet awkward and sub-optimal in terms of performance and safety. The ability to easily develop sophisticated Web-based applications optimally segmented between client and server in the context of the heterogeneous and dynamic environment of the Web while not compromising safety, performance, nor intellectual property, is the goal of current efforts. The first significant result of those efforts is Java, a C++-derived language with capabilities specialized for Web-based application development. Java is compiled by the developer to a platform-independent byte code format, with byte codes downloadable via HTML browsers to the client, and interpreted by a virtual machine which can guarantee its

safety. Sun is working to improve the safety, performance, comprehensiveness, and ubiquity of Java, and the industry appears to be accepting their approach. Others, especially other language developers, vendors and users, are taking similar approaches to developing Web-based applications in their languages, by supporting safe client-side execution in some manner, including targeting the Java Virtual Machine.

While Java certainly has the edge at the moment, a belief which was reinforced by the 5000+ attendance figure at the JavaOne conference in May 1996, we believe there is room for more than one winner, and that an end result somewhat broader than just Java would be in the best interest of developers and users alike.

Safety is the biggest issue. The safety of a program is a function of the safety of the environment in which it executes, which is just another program. At some level, the user must acquire a potentially unsafe program from a trusted source. At present, we acquire Netscape, Java, and Windows from trusted (relatively) sources. Because there must be a trusted environment in which to execute safe, platform-independent programs and because users are only likely to trust a limited number of big name sources for that trusted environment, there has been speculation that diversity, including diversity in Web programming language choices, would be reduced. While this could become true, it now appears unlikely because language developers are proving that they can retarget their programming language

to someone else's execution environment. A more reasonable view of the future is a full diversity of programming languages supported by a few trusted execution engines. At present, most efforts are targeting Java's Virtual Machine(VM), mainly because it is widely distributed with Netscape and is being licensed by other browser vendors. It's possible that the Java VM ends up being the *one* trusted execution environment, but it will probably be one of several general purpose execution environments, that together with many special purpose environments, will be distributed by trusted sources. An ideal outcome might be industry-wide standardization on a trusted virtual machine specification and validation of implementations by an industry group such as X/Open. Regardless of how it occurs, we do

not think diversity of programming language alternatives will be reduced in the long term. However, it is likely that we will see some narrowing of our choices in the short term as language developers adapt their existing offerings to this new area and develop new ones.

The rest of this document surveys languages and interfaces being used for Web programming, attempting to provide a snapshot view of the direction that language is going to meet the needs of Web programmers, and its status.

Languages and Interfaces

The languages and interfaces surveyed below are the result of various attempts to create the "ideal" Web programming language, usually by extending and restricting existing languages. Web programming languages have many ancestors: scripting languages, shell languages, and conventional programming languages. The resultant Web programming languages show a variety of their syntax, computational and data model, and implementation style (subject to the design constraints discussed in the previous section), and as a result a fair number of distinct approaches taken. It is instructive to note that the original language boundaries are often blurred as development progresses.

The surveyed languages are listed in alphabetical order. If you intend to read the entire survey section, you will find a lot about Java, Tcl, Python, and Perl, as many other languages are compared to them.

Not all relevant languages are discussed. Some are only mentioned by a link. They are languages we've seen

applicable to web programming in some ways. We have not investigated further. We hope to do so in the future.

Ada95

Ada95 is the latest version of the Ada programming language, which now supports object-oriented programming. It is used widely in government and industry.

AppleScript

AppleScript is Apple's object-oriented English-like scripting language and development environment for the Mac, bundled with MacOS, and is used widely for scripting tasks on the Mac. Recently, it has been used for programming tasks. Web-Runner enables the execution of AppleScript scripts embedded in HTML files by a client running Netscape. The most widely used version is the Macintosh, MacHTTP, a shareware product. Its commercial sibling, both use AppleScript for scripting.

BEF

BEF is an object-oriented PASCAL-like script describing behavior in VRML.

CCI (Common Client Interface)

NCSA Mosaic CCI (Common Client Interface) specification (protocol & API) that enables applications to communicate with NCSA Mosaic Web browser, to control Mosaic or to obtain Web via Mosaic. Note that this is not for invoking applications (applets) from Mosaic, but for obtaining from the application. Invocation of client-side browser is currently specific to the browser supporting NCSA helpers. Once the application communicates with the browser with CCI. CCI interface currently defined for this purpose, meeting with some acceptance, as Tcl and

CGI (Common Gateway Interface)

A Web daemon *executes* a CGI program or returns the results to the client (e.g. a query database server), rather than simply returning a referenced file, as it does with an HTML ref

are passed from the server to the CGI program as environment variables. The program is sometimes written in C++, or some other compiled programming language, more often it is written in a scripting language (e.g. Perl or Python). To prevent damage to the server, CGI programs are stored in a protected directory under the control of the webmaster.

CMM

Cmm, now renamed ScriptEase: WebServer Edition, is a streamlined version of the C computer programming language. C and Cmm differ in one major area: memory management. With Cmm all memory management is handled automatically, so there is no need to create buffers, declare variables, or declare data types.

With this major exception, Cmm and C are very similar. Cmm supports all of the standard C functions (including structures and arrays), and they are used in the same way as in C. For use with CGI programs, Cmm provides specialized functions to easily get and set environment variables and to create HTML pages on the fly.

Dylan

Dylan is a dynamic object-oriented programming language with a pascal-ish syntax, and a lisp-ish semantic. It was developed at Apple's Cambridge lab in cooperation with Columbia University and Harlequin, Inc., and reviewed by the user community, mostly former Common Lisp programmers disenchanted with C++. The goal of the design was to create a language with syntax, performance, and footprint acceptable to mainstream programmers (like C/C++), but with many of the characteristics that experienced programmers value in Lisp (e.g. evolutionary development, optional type declarations, runtime safety, garbage collection, management, and ease of maintenance). It was first released as an unsupported \$40 "Technology Release", and when Apple, in part, shut down the Dylan project, although it was ported to MacOS on the Power PC appears to have continued. CMU has developed a byte-code compiled version called Mindy that runs on several Unix platforms, including Windows NT, and it continues development of a new compiler. Harlequin plans the release of its own development environment for Windows NT in mid-1996. See for a comparison of Common Lisp and Dylan.

C++, and Java. Scott Fahlman states that suited to complex programming tasks that be a good language for building safe, Web- although I have not seen any effort to apply task.

Guile

Guile is GNU's *extension language library*. It machine, a run-time system, and front end languages (e.g. Scheme, Ctax (scheme with Lisp (future))). Guile interacts at several levels. VM can call Tcl programs, and, therefore, the languages can call Tcl programs. The Tk library accessible in this way. Tcl programs can call written in any of the extension languages, and Guile Virtual Machine is similar to Java's. A interpreter is being developed. Guile is implemented Scheme and C, and C and Scheme libraries programmers using the extension language Web Browser, written in Tcl, is being adapted to Guile.

HyperTalk

HyperTalk is the English-like scripting language for HyperCard. It's described by its fans as simple but simpler and more forgiving. Given the lack of HyperTalk-literate programmers in the Macintosh community, it might very well be preferred by many over UserTalk for many web scripting tasks on the Mac.

Icon

Icon is a full-featured programming language developed at the University of Arizona with a C-ish syntax and C-like heritage, making it particularly suitable for systems programming, and, therefore, similar in this way to other languages used for Internet programming. I've seen Icon used in this context, but haven't come across any examples towards that end.

Java

Java is the leading contender for a full featured programming language targetted at Internet applications. Its familiarity (derived from C++), platform independence, and availability on any platform which implements the Java Virtual Machine, give it performance (byte-code compiled faster than

interpreted), and safety (downloaded apple integrity, and only interpreted by trusted Vir is being aggressively distributed and promo Microsystems, which developed it, and, evi way to loosen Microsoft's and Intel's grip o platform. Netscape, the leading web brows Java VM, and Java applets are appearing o everywhere. Even Microsoft, which is prom Script for this purpose, has licensed Java fr supporting it in its browsers. The list of Jav and includes other major players, like DEC distributing a Java developers kit free of ch writing, in the interest of promoting Java's recently announced the development of mi optimized for Java for different markets (fr to high performance 3D "Network Applianc strategy is successful, the application platfo Java displaces Windows or other OS's as th application developers, then the whole balk the impact is potentially across the entire c not just the Internet. The ability to deliver a independent application, or, more correctly, application, is of great appeal to developers

portion of their resources developing and n of their products for the different hardware combinations. With Java, one set of source important, one byte compiled executable, c all hw/sw platforms. While interpretation of program is slower than execution of a native claim is made that, once interpreted, the re of comparable performance, which means interpreted once and the result cached local executed optimally. This is great news for U Macintosh vendors and users, who often s delayed availability of software and high pri demand, and, likewise, for non-Intel chip a vendors. It's potentially disastrous news fo Intel, who, arguably, often sell their product basis of their market position, rather than t Hopefully, the result will be a more level pla vendors and more choice for consumers, a replacement of Microsoft and Intel with Sun

That said, not everyone agrees that Java is most common complaint is that Java is no basically a slimmed down, cleaned up C++ library. C++ programming is not described

"simple", and Java programming is not much simpler when compared to HTML, or some other language, far forward as its competition. Java is the market leader at the moment, so it is the obvious target.

HORB is a freeware implementation of a standard Java ORB.

Jylu adds support for Java clients and servers. Jylu sourceware ORB that supports interoperability with programs written in Python, Common Lisp, and Modula-3.

JavaScript

JavaScript (nee LiveScript) is Netscape's scripting language integrating HTML, Netscape plug-ins, and Java. It is based on Java, and is mostly syntactically compatible, but differs from Java in that it is interpreted, rather than compiled. It only supports built-in objects and functions, rather than full support for user-defined objects, inheritance and methods, is integrated with HTML, is invoked from HTML files, weakly typed, and is not a true programming language, but retaining HTML

principal criticism of Java programming is that it is more complex than HTML programming, more like C programming, and therefore is not as accessible as HTML. This is an issue that JavaScript attempts to address.

KQML (Knowledge Query and Manipulation Language)

KQML is a language for describing the exchange of knowledge among agents. Agents are one of the paradigms in which knowledge is accumulated and processed in a distributed, heterogeneous environment like the World Wide Web. Telescript uses the agent paradigm. Standardizing the interoperability of such agents are crucial to the success of the web, and KQML and its siblings provide such a framework.

Linda

Linda is an extension language for extensible architectures.

Lingo

Lingo is the object-based scripting language for the multimedia authoring system created by Apple.

often compared to ScriptX, Telescript, Java resembles the latter most, but it is more specific than any of those. It is specific to Director, which is used for authoring CD-ROM titles, and is not available on the web, which limits its applicability to other purposes. The use of ShockWave, a free Netscape plug-in, so that content created with Director can be displayed in Netscape, and other web browsers.

Lisp

Lisp is a list processing language created for artificial intelligence research by John McCarthy at MIT.

Common Lisp is the dialect of Lisp with the most widespread current use, especially for large complex systems (e.g. artificial intelligence) in industry, government, and academia. It was designed in the early eighties with some DARPA funding. It is a representative of the several Lisp dialects in use today. It is as a way to converge on a common dialect. The use of Common Lisp for Web-based server applications is growing. A tool to convert CLIM GUIs to HTML and CL-HTTP is available. A client's browser. CL-HTTP is an HTTP server. Common Lisp and targeting the intersection

hypermedia and artificial intelligence research. Harlequin, the vendor of a commercial Compaq WebMaker, which enables conversion of FrameMaker documents to HTML.

Scheme is a statically scoped dialect of Lisp, used primarily in academia for research and education. Scheme 48 is an implementation of Scheme that uses a byte-code representation that is then executed by a Scheme Machine, much like Java does. The Scheme 48 MIT project aimed at developing a substantial Scheme48 software, including software applications on the Internet (e.g. TeX->HTML, Web agents, tk)

Emacs-Lisp (Elisp for short) is the dialect of Lisp used to implement and extend the Emacs text editor. It was developed at MIT in the sixties. It is similar to Scheme, but smaller and free, and is in very large distribution. It comes with Emacs. A browser, GNU-scheme, is implemented in, and is extensible with, Elisp. It has widespread use as a scripting language, its long-term Internet-awareness of its large user base. I have expected to see some effort to apply Scheme to applet execution, but I see no evidence of it.

WINTERP is a GUI development environment in Tcl/Tk and Python, but based on XLISP-PLUS, an object-oriented lisp implementation, and including Windows and Motif libraries. WINTERP runs on many platforms (XLISP runs on a variety of platforms) and has been ported elsewhere. While WINTERP sees the need for adaptation to Internet programming as Tcl/Tk does, we see no effort to move it in that direction.

Perl

Perl is described as a compiled scripting language that combines elements of C with some Unix scripting and other languages (e.g. sh, awk, sed) into a more powerful language that subsumes the functionality of all into one whole, and is compilable, and, therefore faster than its forebears. Perl's advocates tout its ease of use, comparing it to Java, especially. One of the motivations for developing Perl was to provide an alternative to C that were a little too hairy for an existing Unix environment where performance was an issue. C was seen as too low level, and C development too time consuming, thus delaying the need to program at a lower level. Perl was successful, especially among system administrators.

scripts are often built by systems folks, Perl is no exception, too.

The major difference pointed out between perl and tcl is that perl is somewhat faster because it is partially pre-compiled and optimized, which dramatically reduces the reparsing required in tcl. There is also a headwinds in other shell languages, towards string manipulation in the way when using tcl for programming strings. On the other hand, tcl is simpler, and a more powerful meta-language, in developing special purpose applications like tk.

Perl's roots in the world of Unix system administration (awk, sed, sh), and its much larger user base are significant differentiators between Perl and Python.

Perl advocates eschew Java's greater commercial hype. On no subject do emotions run hotter than Java predates Java, better suits internet programming, they say. A common comment is that Perl is a good language for this purpose, but there are many other languages. There are some reasons to believe Perl is good, although there is counter evidence.

there is no evidence that Java should be the client extension language for the Internet, promoted as such by Sun and Netscape, and users of other languages.

Perl, as a programming language, doesn't have the speed and security desired for Internet programming, but those features are now available. Perl/Tk enables access to the Tk GUI library (from tcl/tk). There is a module that enables perl code to be sent electronically signed to a remote machine over the Internet and executes such code in a secure, limited environment. Pgpsafeperl and LPSP (limited pgpsafeperl) are the names for Penguin precursors. The two together are (to some, superior) to Java. Perl CCI enables CCI programs to be written in Perl. Safecgi enables programs written in Perl in a safe environment on a server.

Phantom

Phantom is an interpreted language targeting interactive, distributed applications such as conferencing systems, multi-layer games, and

work tools. Phantom combines the distributed semantics of Obliq with a safe, extended subset of C. Objects, static-typing, threads, exceptions, and an interface to the Tk GUI toolkit, are included.

Python

Python is an interpreted, object-oriented language designed as a full-featured, but easy to use, scripting language. Created by van Rossum at CWI in the Netherlands. Initially available only in a Unix environment, Python is now available on many platforms and applications are portable across platforms. Guido van Rossum developed a substantial, although still modest, library. As a scripting language, an application development language, and an embedded extension language. Python's design is influenced by ABC, a little known language developed at CWI. Python's syntax evokes C and C++, but is more similar to those languages. Python fans tout its readability of syntax in comparison to C, C++, Java, Perl, and most other interpreted languages, the strength of its type system and its suitability for significant system development in comparison to Tcl, and its extensive standard Python and C/C++ libraries. Like Java, Perl, and Tcl, Python offers a portable GUI library, several really.

complain about the lack of regular expression output formatting natively in Python. Perl is sysadmin's shell language than Python, and and less capable. Python is more of a regular language, but simpler and easier to program are suited to Internet programming. Safe-F for changes to add safety to Python. Grail which supports the download and execution in a safe Restricted Execution Mode. Grail library.

REXX

REXX is IBM's dynamic scripting and extended developed by Mike Cowlishaw at IBM's UK descended from EXEC, the command language operating system, and influenced by PL/I. F extensively on IBM platforms, especially OS available for other platforms (e.g. DOS, Win is like Tcl in that it is simple and the string is REXX is easily interpretable, and many is of only as an interpreter, although compilers a REXX extends REXX with object-oriented structures objects, classes, and methods to REXX's standard

It also adds a number of predefined classes programs can interact with Smalltalk, C, or SOM (or DSOM, IBM's OMG CORBA-compatible SOM, for distributed interaction). IBM is also VisualAge-based GUI builder and visual app environment for Object REXX. Object REXX NIIIP, a US-government sponsored consort facilitating electronic commerce on the Internet. REXX's response to Java, a REXX to Java translator permits REXX programs to be delivered as and executed on client platforms with the J combining the ease and efficiency of REXX the performance and wide availability of the

ScriptX

ScriptX, a multimedia object-oriented program was the principal technology produced by Kaleida venture of IBM and Apple started along with PowerPC. Kaleida Labs was shut down late 1996. ScriptX considered two years behind schedule. Significant portion of its potential market to Lingo. Release 1.5 of ScriptX and the associated (required to view ScriptX scripts) was announced

control was passed to Apple.

ScriptX proponents tout its platform independence, object store, and rich multimedia class library. The former is as a local cache for applets retrieved from the Internet.

SDI (Software Development Interface)

Spyglass SDI (Software Development Interface) is a competitor to NCSA Mosaic CCI (Common Client Interface). The expectation is that SDI and CCI will eventually merge into a common specification. In addition to the CCI, SDI also provides a protocol for initiating a new browser to the client application. This protocol allows the application to be informed when the current browser or actually diverts handling of the request to a new application. This addition makes SDI an appealing alternative for invoking a new client application from a web browser. Netscape Navigator Web browser supports SDI on Windows and MacOS.

sh, csh, ksh, bash, tcsh, rc, zsh (UNIX shells)

In Unix-speak, a shell is the user's command interface to the operating system. The Bourne shell (i.e. the Unix shell), and still is the most widely used, for many years, other shells were developed, differing in syntax and semantics of the command language implemented. Other Unix shell languages are ksh (Korn shell), bash (Bourne again shell), tcsh (Tcl shell) and zsh (Z shell). I won't go into the differences here is that these shells are essentially interpreted languages, and are commonly used on Unix for a variety of programming tasks, especially by system administrators, including Web site maintenance and scripting. Newer languages used in this context, like Tcl, were heavily influenced by the shell languages and were generally developed to deal with the increasing complexity of scripting tasks, and the desire for more high-level languages to somewhat different from the former, Tcl a case of the latter, with the rapid development of GUI interfaces.

Smalltalk

Smalltalk is a dynamic, object-oriented programming language with an integrated GUI development environment.

execution environment. It has a considerable history, having been developed by Alan Kay and others at Xerox in the late seventies. Smalltalk is the central language of the object-oriented programming community. The full implementation of Smalltalk has been both a strength and a weakness. It provides a very consistent conceptual model that runs across all components of the system, but this consistency has accentuated the disconnect between it and other programming languages. This has also been observed of other object-oriented languages. This has kept the Smalltalk world somewhat isolated from the application development world, although the use of Smalltalk for object-oriented analysis and design, the success of the adoption of the object-oriented model in other languages, and interoperability in many domains has brought Smalltalk more mainstream in the last several years. Smalltalk's object-oriented nature, and extensive GUI orientation, make it well suited for Internet programming, but the Smalltalk community has been slow to capitalize on this.

ParcPlace-Digitalk recently introduced VisualWeb, which facilitates the use of Smalltalk in Web-based applications by generating the CGI between the HTTP server and the application, and by generating the HTML needed for the application GUI for the application in conjunction with a

VisualWave does not appear to include the deliver and execute Smalltalk applets on the web, although the source is evidently portable, and OLE, CORBA and Java is planned. The form factor from their recent licensing of HP's Distributed Systems adds CORBA compatibility to ParcPlace's Smalltalk, the latter means the generation of Java by the Smalltalk from Smalltalk is not known.

IBM has announced WWW Parts for VisualWorks. The latter combines a visual application builder with Smalltalk and SOM (and DSOM, IBM's OMG-compliant extension to SOM), to enable applications to be built in Smalltalk to use components separately developed in other language. WWW Parts seems comparable to VisualWave, described above.

If GNU Smalltalk is going to be an extension of Smalltalk I haven't heard about it.

Tcl

Tcl (tool command language) is a widely used scripting language generally used in conjunction with

for building quick and easy X windows GUIs but also valued for the ease by which C libraries are imported and referenced from Tcl. Tcl/Tk was developed by John Ousterhout while at UC Berkeley. Development continued at Sun Labs under his leadership. It's interesting to see what's going on at Sun, also Java's home. Java is a principle competitor. John Ousterhout addressed this in an article, "The Relationship Between Tcl/Tk and Java". He says that it's true that both languages are appropriate for rapid prototyping, but they are different, have different strengths and are likely to complement each other. Tcl is easier to program, quicker to program, and slower to execute. Java is harder to program, quicker to execute. Tcl is used to glue together other programs, generally written in Java. He expects Java to replace C++ in this role for GUI applications. This role puts Tcl in competition with Java.

A couple of years ago, Tcl was receiving the same amount of hype that Java is receiving today, lots of it, with people overhyping Tcl's benefits, and some of it dealing with Tcl's weaknesses the downside of success.

<http://ftp.perl.com/pub/perl/versus/tcl-discuss>
<http://ftp.perl.com/pub/perl/versus/tcl-compare>

to Perl. In the interest of hugely oversimplifying let me summarize by saying that Tcl critics find it incomplete, inelegant, and inefficient. Its pro is that it is quick and easy to program for what it was

There's quite a bit of activity at Sun, and expect extends Tcl/Tk towards being more appropriate for programming. Ports are underway (some are available) to MS Windows et al and Macintosh. Tcl will run on any platform. A Tcl/Tk GUI builder and a Tcl compiler are being developed. Safe-Tcl at Sun is integrating Safe-Tcl into their release of Tcl/Tk, Safe-Tcl, and NCSA Mosaic CCI into a single side scripting for the WWW. Expect extends Tcl with other interactive programs or users. Tcl interface to the OMG CORBA Dynamic Invocation Interface (Iona's Orbix), enabling Tcl scripts to interact with services.

Telescript

Telescript is General Magic's interpreted, object-oriented language with for remote programming. It is based on the agents paradigm. Agent programs are sent

they execute, possibly in conjunction with (can move themselves to new places to execute state with them. Places are subprocesses of the Telescript Engine, which is a server program integrated with an HTTP server (with CGI) that they describe as an active Web server. This is architecturally to ParcPlace's VisualWave and both for Smalltalk. Agents are mobile in that computation can move from one place to another; can only execute in the context of a Telescript program; should not be considered client programs. Telescript provides no runtime support on the host to execute agents. This separates them from other languages, which move computation from web servers to clients. Telescript moves computation in a distributed manner from one web server to other web servers. The Telescript language itself is similar to C++, but is specifically designed for the agent paradigm with built-in support for interacting with other agents, and supports agent lifecycle management, including the persistence of agents. Unlike Java, Telescript is safe and platform-independent.

See

<http://www.sunlabs.com/people/john.oust>

for a comparison of Tcl, Telescript, Visual Basic, and
John Ousterhout, Tcl's creator.

<http://www.genmagic.com/About/Release>
explains the difference between Telescript and

Frontier is another popular script development environment
the Macintosh, which comes with its own scripting language
UserTalk. It was developed by Dave Winer of
Software. Frontier is used to develop scripts in
AppleScript, or any other scripting language supported by
Apple's Open Scripting Architecture (OSA). For the same
reason, UserTalk scripts can be developed for a wide range of
tools, and CGI scripts, and other web-related applications,
can be written in UserTalk, and in Frontier. For instance, CGI scripts for WebS
developed in UserTalk with Frontier.

VBScript (Visual Basic Script)

VBScript is Microsoft's planned candidate for a new
scripting language. It is expected in mid-1998. It is based on
Visual Basic, Microsoft's popular visual programming language,
with no GUI building capability, with unsafe

removed, and with access to other applications. VBScript source code is embedded in HTML and sent to the client in the HTML file, where it is compiled in association with its runtime libraries. Microsoft's JScript and OLE Scripting Manager on the client-side will interact with a specified interface. The Scripting Engine manages compilation and invocation of downloaded scripts. Visual Basic Script or any other scripting language is also intended to support Visual Basic and Java. The idea is to make multiple language runtimes available to web browsers. Microsoft intends to elicit the cooperation of consortia and vendors in defining and standardizing the interface. Microsoft intends to support VBScript on Windows platforms and on the Macintosh and to extend the technology to UNIX vendors.

VRML (Virtual Reality Modeling Language)

VRML is a specialized language for describing virtual environments and movement through them. VRML is the standard for describing such scenes in the context of the World Wide Web. As more and more sites include virtual simulations, VRML will become more omnipresent. Like HTML, is downloaded from a server and ex

interpreter on the client, just as a Java applet is downloaded and executed. Netscape now has its own JavaScript interpreter, and there are many others.

WebScript

WebScript is the object-oriented scripting language of Apple Software's development environment for Macintosh applications. WebScript is an interpreted scripting language in much the same way that JavaScript is an interpreted scripting language. WebScript, however, is used in WebObjects for server scripting, where CGI and Perl might be used, rather than for client-side applets. WebObjects is expected to support Java and JavaScript on the server side, in addition to JavaScript on the client side. WebScript may be relegated to the scripting language only for Objective-C users.

There was also another WebScript, from WebWorld, which has since been renamed htmlKona. It is a Java-based tool for generating HTML pages.

As a project manager, you do not need to know how to code an SQL database using Active Server Pages and VB Script. However, it's important to know the limitations of using these programming tools to accomplish this task. By introducing you to these programming tools and descriptions, it is hoped that you will be able to understand which tools offer the best functionality for the task at hand.

Lab 12.3 Exercises

12.3.1 Oversee Coding

Research and write descriptions for three
What are their best applications?

a)

A subcontractor fails to produce the function.
What is your fall-back plan?

b)

Your company is dealing with a new project with a significant learning curve and the project budget. What are your options?

c)

12.3.2 Oversee Testing

How would you verify that the Web site quality control purposes?

a)

Who would you have testing the Web sit

b)

Lab 12.3 Exercise Answers

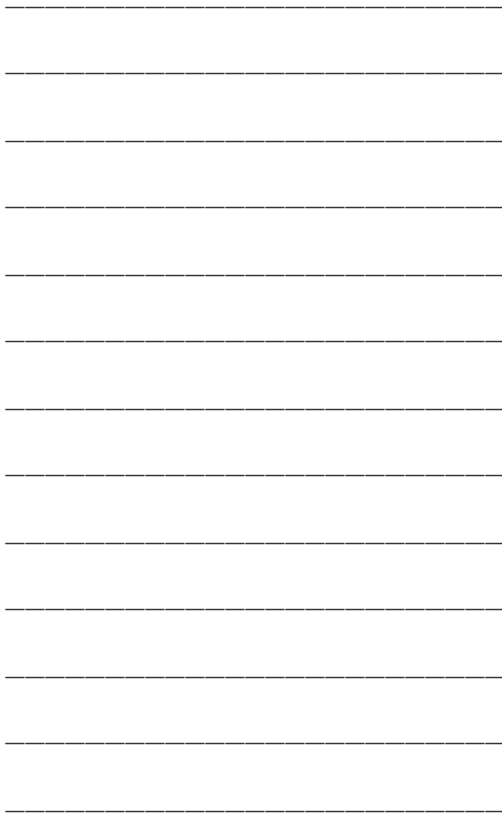
This section gives you some suggested answers to the

questions in [Lab 12.3](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

12.3.1 Answers

Research and write descriptions for
What are their best applications?

a)



Macromedia Director 7

Used to build applications that encompass sound, text, and video. Essentially, Director is a multimedia authoring tool for content. Director supports Java, HTML, and Director 7 Shockwave Internet Streaming productions, including interactive Java applets (e.g., Java), business presentations, interactive ROM titles and games.

In comparison, Flash produces vector navigation interfaces, technical illustrations. Flash files can play back using the Flash Player or Shockwave Player.

XML

Also known as eXtensible Markup Language, developed by the W3C. XML enables documents to provide more functionality than HTML. It is supported by current Web browsers. However,

Answer:

XML in Internet Explorer sometimes

*XML's usefulness depends solely on
Once Internet Explorer supports XML,
its only use right now is on intranets
loaded onto company machines.*

Active Server Pages

*ASP is the scripting language supplied by
developer to embed functionality
with an interactive experience. Unlike
that Perl must be installed in the
can be embedded right into the HTML*

*ASP can be used to access databases
provide the user with searching capabilities
sessions.*

A subcontractor fails to produce the product.
What is your fall-back plan?

b)

First, you have to assess whether substantial performance. What are they failed to produce? Are they on the requirements and were unable to meet expectations?

If the problem truly resides on the project manager, have the ability to reprogram the plan and ask the subcontractor based on the amount of programming the subcontractor is leaving modules to determine if the programming is correct. Needs to be made for functioning

Answer:

Also, it is always good to have several possibilities. Therefore, if a firm justifies the project manager should be able to

This is where a project manager must be laid at the contracting firm's feet for the subcontractor's control. If the burden is up to the project manager to make the subcontractor to bear the burden of the sub has flat bid the project. This alienate good firms and sharp pro

Your company is dealing with a new significant learning curve and the budget. What are your options?

c)

*First, I feel that the client should
curve. While the Web firm may fe
opportunity to get its feet wet wit
costs associated with this should
unless the client is looking for sor*

which would take **any** firm some
This is the only circumstance in w
along.

Too many times I've heard of peo
taking on a freelance Web project
materials, unless it's about \$5 an
paying too much. When the client
Answer: is damaged.

How do you plan for this? Figure c
would charge to do this kind of wo
that has a learning curve associat
profitability. The object usually is
project becomes a portfolio piece
bid other work based on the credi

If all is going down the tubes fast
functionality out to a more experi
will have identified several "bail-c
project and thus can contact anot
programming team.

12.3.2 Answers

How would you verify that the Web quality control purposes?

a)

Answer: *Interview the content editor. Has should be able to produce screen as defined in the test plan.*

Who would you have testing the '

b)

*I would prefer not to use people v
project. Rather, I would prefer th
how it is supposed to work, try al
that the Web site would not expe
would later want them to follow t*

Answer:

*The testing team's objectives are
responses by making the Web site*

Lab 12.3 Self-Review

Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) The following is beyond the subcontractor's control.

1. _____ Changing programming requirements necessitate changes in completed programming code.

1)

● _____ Illness rocks the subcontractor's firm, causing programming to fall behind because of employee absences.

(True/False) Which individuals would be a good addition to a Web site testing team?

1. _____ **Project manager**

- 2) ● _____ Programmer
- _____ Graphic designer
- _____ Editor

Chapter 12: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

Identify additional tools a project

- 1) manager can use to keep the technical development of a Web site on track. Include software, Web-based tools, and/or written tracking mechanisms.

- 2) If a major programming malfunction is detected during the testing process that requires reanalyzing programming functionality, how can the Web firm address the malfunction while cutting its losses?

Chapter 13.

Launch/Postlaunch Activities



"Build it and they will come."

From the movie *Field of Dreams*

Chapter Objectives

In this chapter, you will learn about

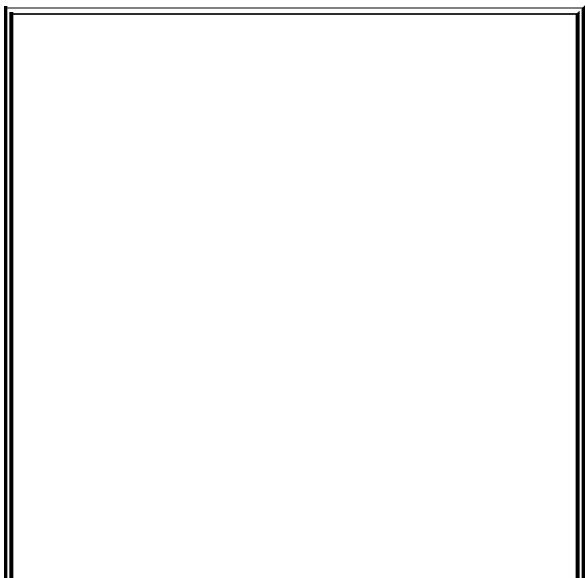
- ✓ Marketing Strategy
- ✓ Training/Documentation
- ✓ Internal Audit

Sometimes the implementation date sneaks up on the development team, and it is easy to skip some of the steps that are discussed in this chapter. How implementation is handled can better educate the client, not only regarding the use of the Web site but also how to market it. It also can build the client's confidence in

the Web site because (1) it works and (2) the client knows how to make it work. There are no surprises.

In this chapter, Charles J. Bleau, the project manager behind Disabilitynews.net, contributes his ideas regarding plans for marketing a Web site ([Lab 13.1](#)). Charlie's material is meant to compliment the materials that my coauthor, Donald Emerick, has presented in Part I.

Lab 13.1: Web Marketing Strategy: Let's Promote That New Web Site!



Lab Objectives

After this Lab, you will be able to

- Define Marketing Communications Objectives and a Promotional Mix
- Promote a Web Site with an Existing Promotional Mix
- Identify Marketing and Promotional Opportunities on the Web

The actual technical and creative development of a Web site, and getting a working site

up and running, is not the final part in Web project development. Somehow, visitors need to be attracted to the site hence marketing communications also known as promotional strategy. The owners of a site for a small mom and pop retail store may not require 20,000 or even 100 visitors a month. However, if the new Web site is part of a new business process or is an e-company (i.e., an electronic commerce storefront like [amazon.com](https://www.amazon.com)), then developing a cohesive marketing

communications plan is vital to promote the site after it has been launched.

A large Web site may spend thousands of dollars in media advertising monthly to promote itself to its target audience. On the other hand, a small Web site for a local florist may spend only \$25 putting its Web address on its business cards.

Web marketing can be expensive in some cases, but there are also no-cost or low-cost strategies to make your site visible by both utilizing

offline and online media vehicles.

Marketing Communications

Marketing communications or promotional strategy is part of the four P's of Marketing. Here's a refresher:

Product What is your product/service? Who are your customers? How will you position your product/service so it will

appeal to your customers?

Place How will you
distribute your
product/service to your
customers?

Price How much will
your product cost?

Promotion What media
vehicles (newspapers,
magazines, direct mail,
telemarketing, TV, radio,
online/Web, etc.) will you
utilize to promote your
product/service to your

customers (i.e., target audience)?

The **four P's**, including the marketing communications objectives for the product/service, are defined extensively as part of a marketing plan. The marketing plan will take into consideration all the business goals of the company and develop specific marketing objectives to achieve these overall goals. For the Web project, the project specification will function similarly to a business

plan including all the marketing objectives and communications objectives of the Web site.

Marketing Communications Objectives and the Promotional Mix

To implement marketing communications objectives, a promotional mix or combination of media to reach the target audience needs to be designed.

The promotional mix assumes the following:

You know who your customer is you've done research or know from past experience who they are (how old, how much money they make, where they live, male/female, etc.).

You understand the advantages of various media and media vehicles (or have an advertising agency you can consult

with about it) and how they relate to your target audience.

With this in mind, a combination of various media and related media vehicles to reach the target audience needs to be identified.

Examples of media and media vehicles utilized in the promotional mix include the following:

Media	Media Vehicle
--------------	----------------------

Advertising	TV, radio, newspapers, magazines, outdoor, infomercials
Direct marketing	Mailings, telemarketing
Public relations	Press releases, publicity, trade shows, special events
Interactive/Web	Web sites, online banners, targeted e-mailing (spam)

Each media vehicle has relative advantages and disadvantages in reaching a specific target audience or customer group a

multitude of resources and studies are available, including Nielsen. There are also different media costs, production costs, and a variety of considerations for each of them. A good marketer or advertising agency can develop a promotional mix that will include all these factors, ultimately taking into consideration both the effectiveness of reaching a specific target audience and the overall budget.

Promoting a Web Site

With an Existing Promotional Mix

Once a new Web site is ready to be launched, the marketing machine should already be rolling. Whether the Web site is a new service for customers, version 2.0 of an existing site, or a completely new e-business, the existing promotional mix for your company should be utilized as the backbone of all marketing communications why spend more money if you don't have

to? Additional marketing resources may be needed to help push customers onto the site if it's a new e-business; however, the small to medium-sized business may only need to promote the new Web site through existing advertising and promotional campaigns.

There are some small adjustments that can be made with little or no cost to promote the new Web site:

Put the Web address
(URL) on business cards,

letterhead, yellow page ads, and any other advertising the business conducts on a regular basis.

Display signage at point-of-sale promoting the new Web site.

Send a mailing to all existing customers promoting the new Web site and the services provided online.

Send a press release to

local/region newspapers promoting the site. If it's an e-business, regional and national trade magazines can be utilized.

If the business regularly attends trade shows, promote the new Web site there.

If it is a medium to large business, integrate the Web address with existing advertising campaigns.

These are just a few of the

traditional marketing tools that can be utilized to promote the new Web site without spending an armful.

Marketing and Promotional Opportunities on the Web

So far, the focus of this discussion has been on understanding the promotional mix and how traditional media can be utilized as a means to promote a new Web site. As you may already know, the

explosion of the World Wide Web has brought about an explosion of e-businesses, including our friends in the advertising industry.

Marketing and promotional opportunities on the Web are still evolving. Many people from the advertising and direct marketing communities have been trying to cookie cut the online advertising and marketing of Web sites into existing philosophies with little or no success. The World Wide Web is often equated with the Wild, Wild West, with few laws

and all the control given to the consumer instead of the advertiser something advertising agencies are not used to. The Web gives users the freedom to click away and avoid the advertising clutter they've been subjected to with other media, like TV and Radio.

As discussed in Part I of this book, successful Web developers need to be aware of the creative presentation of their web sites give customers the opportunity to engage in an interactive experience that may encourage them to stick around

and perhaps buy something. All the banner ads and targeted e-mails in the world won't keep customers on a boring, uninteresting site.

So, assuming that a new Web site is interactive and an enjoyable experience for the user, various forms of online marketing and promotional tools may be employed to further drive traffic to the site:

- 1. *Search Engines:* The first marketing tactic involves registering with the major search engines**

and Web directories: Yahoo!, Lycos, Alta-Vista, Webcrawler, Metacrawler, Excite, Hot Bot, Info Seek, and America Online Netfind. Registering is easy and free, and with the proper integration of some keywords in the <meta> tags of the home page can be a very successful way of promoting the new Web site online.

- *Cross-marketing:* Swap links and banner ads with suppliers

and other constituents the new Web site does business with. Cross-marketing can be an effective means of driving traffic to the sites of both parties involved. This approach is very effective with nonprofits and small to medium-sized businesses it gets a little dicey if the competition shares the same suppliers, so be aware.

- *Targeted e-mails:* Send targeted e-mails promoting the new Web site to existing customers or people who have visited the site in the past.

Several sites have employed automatic e-mails and news services to people who have visited a site and subscribed to it. This approach can be very effective in keeping past customers and potential customers informed of any promotions and company news.

"Spamming" or mass e-mailing is not a recommended approach for online marketing. Internet service providers (ISPs) as well as e-mail recipients are turned off by such activities. Most ISPs have employed systems to filter

spamming and punish the spammers (i.e., the company that sent them). So try to avoid mass e-mailing.

- *Banner advertising:* Unless the new Web site has a decent sized marketing budget, online banner advertising may be an expensive option. The cost of banner advertising is based upon cost per thousand impressions, or CPM. For example, for every 1000 viewings of a banner ad, a cost will be applied to the advertiser. Web sites that employ banner

advertising base their CPM rate on number of visitors per page and how much business the site generates. Sites can also track the number of hits an advertiser's banner receives to measure its effectiveness and adjust future advertising prices.

Lab 13.1 Exercises

13.1.1 Define Marketing Communications Objectives and a

Promotional Mix

You are the president of a newly formed CDs online. If your Marketing Department students as your business's primary target, list the common media tactics (e.g., advertising, public relations) employed to appeal to this target audience. List some promotions and marketing ideas used by your company.

a)

Develop a promotional mix for your new media you will employ to promote your target audience and in what sequence (if exercise, your budget has no limitations).

b)

What marketing strategies could you employ to get visitors coming back to your site? List your ideas.

c)

13.1.2 Promote a Web Site with an Existing Promotional Mix

You are the Marketing Director of a large

launch a new online e-commerce Web site itself through the following ways: 1) a radio and 2) A large advertising campaign in some strategies to get your customers media vehicles? Be creative.

What are some ways you can measure

a)

13.1.3 Identify Marketing and Promotional Opportunities on the Web

Using the catalog company example, the

customers to the Web site with online m
promote your Web site to increase traffi

a)

Search on the Web for a clothing catalog
their site online?

b)

What are some ways you can measure marketing efforts?

c)

Lab 13.1 Exercise Answers

13.1.1 Answers

You are the president of a newly formed company that sells music CDs online. If your Marketing Department asks you to target college students as your business's primary market, what are some common media tactics (e.g., advertising, public relations, etc.) that you might use to reach this target audience?

employed to appeal to this target
some promotions and marketing

a)

As you may or may not know, the behavior of individuals. Traditionally, college students are "brand loyal" purchasers of products with longevity in the popularity of Levi's jeans. This has changed and advertisers have been looking for a driving force. College students are a demographic that deliver them more value for their money. Levi's has lost their appeal with Gen Xers to Gen Yers. Additionally, there are so many colleges in the United States that it is important to a particular country come into consideration too.

A marketer needs to consider all personality traits (common personality traits and h

Answer:

target audiences of the product/s communications/promotional plan consider the characteristics of the market with the most market potential. Select the most effective means of marketing to the target audience. Maybe posting flyers on college campuses across the country is more effective than an advertising campaign promoting the product.

Remember, there are no right answers for marketing a product or service, only different means and methods. Some methods have been proven to be effective, but there is no secure litmus test for changing the market.

So to answer the question, advertising on TV, radio, billboards, concerts, a promotions table in the mall, direct mailings to students are all effective ways to reach college students. Which method is the most effective? (no dart throwing!) and a good product or service (interactive online experience).

Develop a promotional mix for your product. Specify the media you will employ to promote your product, your target audience and in what sequence. In this exercise, your budget has no limit.

b)

Let's say we received surveys from student groups and have nailed down a couple of key findings that show that our primary target audience, who come from middle-class, working-class backgrounds, want campus housing. They also are trying to diversify their music tastes are diverse: They like a mix of genres.

So we gave our research findings a boost by launching a major push to generate interest in our new campus housing promotions, including coupons and discounts for students who sign up for a trial period.

Here's our promotional mix:

Media

	A series of ads in across the count get one free" pro
Advertising	Ads in the arts a regional/metropo promotion as ab
	Radio advertising media markets c advertising on lo
Direct Marketing	Include the "buy packet distribute
Public Relations	Recruit college st promotional boo Again, utilize the

Answer:

program.

Interactive/Web Selective banner station Web sites colleges.

Don't worry, there are no right answers. Your mix may look very different from

What marketing strategies could you use to get visitors coming back to your site? List your ideas.

c)

*Since we mentioned earlier that t
brand loyal group of consumers, t*

purchase is a viable option. The company has historically discouraged brand loyalty and an increased reliance on the future of the brand and your competition. But in our current market and are trying to generate visitation, a mix dependent on couponing is a viable strategy to encourage future visits to our site. As an e-business retailer such as [Amazon](#), we offer discounts on their products so we can provide an outlet for our target audience. As technology is available, and many

Our overall goal is to use price sensitivity and a coupon strategy to draw visitors to our site and provide a positive experience so they come back in the future.

13.1.2 Answers

You are the Marketing Director of launch a new online e-commerce itself through the following ways: and 2) A large advertising campaign some strategies to get your customers media vehicles? Be creative.

What are some ways you can measure

a)

Of course, the first thing you need is your marketing materials and advertising. If customers buy online, there are benefits to your customers as opposed to the

Answer: *The benefits for you the retailer c*

Cost savings. No need to have service representatives; all the online.

Flexibility in selling products and merchandising. Once that catalog is printed, you can't change it without incurring a huge cost. With an online catalog you can update products anytime. If there's excess inventory for a particular product, put it on sale right away.

Faster fulfillment. Selling online will provide the business with a more streamlined system for fulfilling orders and minimizing data entry errors. This equals additional savings for your

company and happy customers.

The benefits for your online customer include

A customizable shopping experience. Today's Web technology can provide your customers with a customized shopping experience based on their past shopping habits and interests.

Interactivity. Instead of talking to a customer service rep or mailing in a

complicated order form, your customers can enjoy an interactive experience where they browse for clothing online and can see something in every color and drop the items they want to buy in their "shopping basket."

Quick order processing. No more mailing in order forms and depending on the U.S. Postal Service. If it's two days before your brother's birthday, chances are you can get

your gift in time without worrying about the queues in the fulfillment and mailing processes.

The aforementioned customer benefits need to be included in all your marketing materials and advertising. These are the reasons why your customers should buy online and the reasons why your online shopping experience is more convenient.

13.1.3 Answers

Using the catalog company exam
customers to the Web site with o
promote your Web site to increas

a)

Chances are if your catalog comp awareness. So assuming this sce related Web sites (i.e., the online advertise with) and on the major

Answer: *music store example, you could c discounts to draw new customers your site but also to make your s back again. Hopefully, this issue c Web development project (see [Cl](#)*

Search on the Web for a clothing
their site online?

b)

*L.L. Bean is a very good example
much of their e-business from ex
L.L. Bean is a major national and*

Answer: *and advertising includes their We employed all the necessary tactic experience. The creative presenta successful. Check it out at www.ill*

What are some ways you can measure marketing efforts?

c)

*Some very comprehensive Web t
Site Server Commerce Edition inc
that can break down a wide varie
who is visiting your site, which W
your site receives at a certain hou*

*Besides tracking software and "hi
business is doing in generating sa
figures to how much business you
mailers and phone sales. Obvious
online without drawing away busi
phone business, you know your ac
customers are becoming aware o
phone business takes a slight dip
are now buying online. Most likely
of these two extremes. A good w
simple question on your online or
you hear about us?"*

Answer:

Lab 13.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) One of the "4P's" is:

1. _____ Planning

1)

- _____ Procurement
- _____ Place

(True/False) Suggested methods of internet marketing include:

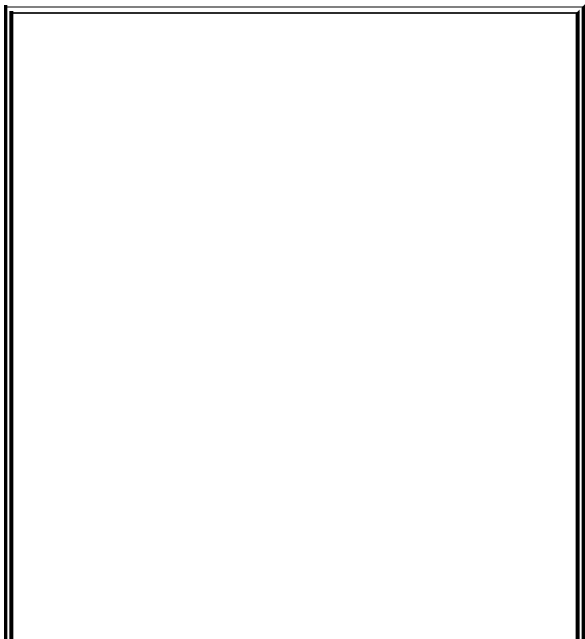
2)

1. _____ **Targeted e-mailing**

- _____ Banner advertising
- _____ Search engine placement

Lab 13.2:

Documentation/Training



Lab Objectives

After this Lab, you will be able to

- [Supply Site Administration Documentation](#)
- [Perform Training](#)
- [Develop Maintenance Agreement](#)

I have heard it said that when a person is leaving a job, he or she tends to be remembered more by the last two weeks at a position than the entire time employed. If an employee has a

chip on his or her shoulder or sleep walks through the last two weeks of a job, often that is how the individual is remembered.

How your firm wraps up a project has a lot to do with how the client will view your firm. If the project team is in a hurry and skims over the appropriate steps to end a project nicely, the client can feel resentment. Sure, the project was finished on time. The graphics may have been done perfectly, and the database functionality top notch. However, if the client

does not fully understand how to administer the site, it's doubtful that the site can live up to its potential. It's also doubtful that when the client is ready to do an upgrade or maintenance he or she will feel comfortable contacting your Web firm again.

Taking the time to educate the client about how the site works, what requires maintenance by the Web firm, and what kinds of things can be handled on the client side puts the realization of the Web site's potential directly into the client's hands.

If the Web site is database enabled, the client will need training in order to understand how to add, modify, delete, and search for records. Maybe there are password-protected areas that the client needs to be shown how to access.

If the client is planning on updating static pages on the Web with Front Page, some instruction will need to be given regarding connecting to the site. Depending on the level of Front Page ability, the firm may want to offer training hours on how to use Front

Page, allowing the client to use his or her own site as a model. The firm should be careful to compensate itself for this type of training. There's a big difference between showing the client how to connect to his or her Web site and showing the client how to use Front Page.

Should the client wish to outsource management of the Web site, it makes sense for the firm to offer a maintenance agreement to the client. There are several models available for an agreement of this sort. Your firm may wish to evaluate

several models and decide which one makes sense.

Making a formal plan for updating the site keeps the material fresh, allows the Web firm to schedule the work, and can cut the client a better deal on maintenance. A firm can offer discounted services for the guaranteed work from the client.

Often you go to a Web site and feel like you're looking at an old issue of a magazine. The material is obviously old, and thus it lacks credibility similar

to how one might read a dated article and wonder if the information was still valid.

Let's investigate some techniques through which to make your firm's last impression with a client a very excellent one.

Lab 13.2 Exercises

13.2.1 Supply Site Administration Documentation

How would you define site administratio

a)

What sort of information should be included in documentation?

b)

13.2.2 Provide Training

What kinds of issues might a Web firm run into with a client?

a)

How could the problems discussed in [13](#)

b)

13.2.3 Develop a Maintenance Agreement

How can a maintenance agreement ben

a)

Devise two plans through which a Web f

b)

Lab 13.2 Exercise Answers

This section gives you some suggested answers to the questions in [Lab 13.2](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

13.2.1 Answers

How would you define site admini

a)

Answer:

*Site administration involves the n
understanding the hosting and up
its continued success. It also enc
marketing initiatives, such as link*

What sort of information should b
documentation?

b)

The following information is key to

- *Hosting requirements (operating systems, programming languages used)*
- *Step-by-step training material, including how to update the database or on how to use the room*

Answer:

- *Requirements for performing the training*

*maintenance plan discussed
Web firm*

- *Contact information for the hosting company*
- *A troubleshooting section that arise*

13.2.2 Answers

What kinds of issues might a Web to a client?

a)

The Web firm must really assess setting up a maintenance and/or have computer-savvy people on s training on much more than just l Therefore, an estimated two hour burden that most Web firms canr

Answer: *this situation, it's best to write a letter to the Web firm to handle all of the mail.*

Client frustration is also a factor and the anxiety when dealing with new company and patient and mature people on staff.

How could the problems discussed

b)

Try to assess up front what type the client is extremely computer things, it is probably a good bet to get a feel for this during the Web

Answer: *being educated about the process Web site build, you feel that you button is on the computer, you can agreement through which the client firm.*

13.2.3 Answers

How can a maintenance agreement

a)

The client is assured of keeping to discounted pricing, when signing a Web firm when an update is also guaranteed a place in the product schedule the work.

Answer:

A maintenance agreement benefits the company, and it can rely on the reg

Devise two plans through which a

b)

*There are several different ways
may be to sign an annual contrac
defined number of updates on a v
Answer: option involves collecting a montl
client to provide update material.
expects and others may not send
work tends to even out.*

Lab 13.2 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) Good site administration documentation should

1. _____ Advise a client on how to use Front Page.

1) ● _____ Explain FTP (file transfer protocol) in depth.

● _____ Offer alternative hosting options, should the client become dissatisfied with the current hosting company.

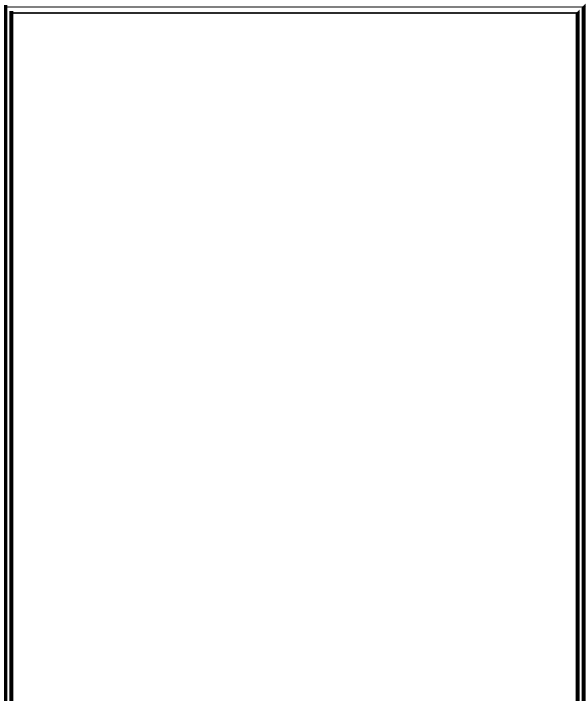
(True/False) A maintenance agreement should cover

1. _____ HTML updates

2) ● _____ Graphic design updates

● _____ Programming functionality upgrades

Lab 13.3: Internal Audit



Lab Objectives

After this Lab, you will be able to

- [Assess Team Performance](#)
- [Evaluate Client Questionnaires](#)
- [Make Phase II Recommendations](#)

Once the project is finished and delivered, it's easy to look forward to the next exciting project in the pipeline. After all, by the time a project reaches launch, everyone on

the project team has hopefully given it their all and is looking forward to taking on something new. A project team can be ready to move on. However, unless it looks backward, the team does not grow.

Identifying the steps that went well and the steps that did not go as smoothly is important. Has someone on the team been dealing with a subcontractor who did not deliver as agreed? Unless this is talked about with the project team, a decision may be made to hire that subcontractor. Could better

communication between the project manager and the creative team have circumvented several composite stages? It's time to brainstorm how that process can be streamlined. Maybe it's time to bring several members of the creative team along on project meetings. How does everyone see the Web site evolving? Creative team members may see a Shockwave application. The technical team may see e-commerce. Making these suggestions to the client can help define the direction he

or she will eventually go with the site and secure new business for the Web firm.

The team may want to send a questionnaire to the client asking how he or she felt the process went. A report card helps anyone to improve their performance.

Conducting an internal audit of the project does not mean that the team should walk away feeling badly about the negative points of the project process. Rather, the tone of these internal audits should be

very positive. Maybe the audit should be conducted during a company-sponsored lunch at which the team does not take on other business. Successful completion of the project should be cause for celebration, not anxiety.

A positive approach to this internal audit is good for project team morale. Rather than singling out nonperformers, the project manager can make a point of singling out performers. This can spur others to wish to be recognized next time. The

project manager can show specific pieces of the Web site that were outstanding and design quality or functionality to be emulated next time.

Call it a dead dog party, Monday morning quarterbacking, or a company field trip to the local laser tag establishment, an internal audit done well can help to identify aggravating stumbling blocks, throw a spotlight on most valuable players, and enhance the client relationship.

Let's see how you would

conduct this process.

Lab 13.3 Exercises

13.3.1 Assess Team Performance

What is the best setting in which to conc

a)

Develop a sample agenda for a postproj

b)

13.3.2 Evaluate Client Questionnaires

What sort of questions would you ask a questionnaire?

a)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

How much emphasis should the project

b)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

13.3.3 Make Phase II Recommendations

How would a project team best identify the client?

a)

How should these recommendations be

b)

Lab 13.3 Exercise Answers

This section gives you some suggested answers to the

questions in [Lab 13.3](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

13.3.1 Answers

What is the best setting in which t

a)



Hopefully, you have mature, talented people who care about the quality of the work and the case. Some team members may not contribute to the team. Or some members may have a poor attitude. Unfortunately, this is not always the case.

Thus, when planning a postproject meeting, be open and relaxed, perhaps an impetuous person will have a lot to say in project meetings. Encourage their ideas. Some uncomfortable people may not contribute. Perhaps the amount of time Bill took to get to town hindered the creative process. The meeting was exposed specifically for all to scrutinize in a generalized fashion so that the people felt uncomfortable atmosphere, preferably away from the office communication.

Answer:

Develop a sample agenda for a postproject meeting.

b)

Answer: *I. Introductions*

II. Scope of Work

III. Review of Final Product

*IV. Feedback from Client
Questionnaires*

*BREAK FOR LASERTAG, FOOD,
BASEBALL, WHAT HAVE YOU*

V. Project Stumbling Blocks

VI. Project Successes

*VII. Experience We Bring from
This Project to the Next*

*VIII. Recognition of Individuals
for Outstanding Performance*

IX. Close

*BREAK FOR MORE LASERTAG,
FOOD, BASEBALL, WHAT HAVE
YOU*

13.3.2 Answers

What sort of questions would you
questionnaire?

a)

A very short questionnaire could I like to find out more specifics.

Rate from 0 to 10 (10 being excellent) the following project areas:

- *Responsiveness of the project*
- *How closely the final product*

Answer:

- *Adherence to project schedule*
- *Graphic design of Web site*
- *Functional design of Web site*
- *How your company's Web site*

How much emphasis should the p

b)

Client dispositions vary. Some clients want a Web site build. Others can be extremely difficult during the Web site build, and the importance of the client questionnaire is highlighted. I had a few clients that I would not want to work with. The client's behavior during the Web site build would want to discuss with my partner. It is easier for this difficult client to understand whether we should have taken on the project.

With a reasonable client who has place a great deal of emphasis on you where you can improve, and

more about the client, so that the future.

13.3.3 Answers

How would a project team best interact with the client?

a)

As the project is progressing, variations will have ideas for the Web site, and the budget or schedule guidelines could be accommodated in a Phase 2. These should be brought to and documented.

Answer:

During the internal audit, the last recommendations for the client. (During the project, but not too much, it is a different perspective and perhaps brainstorming.)

How should these recommendations be handled?

b)

Answer:

Often these recommendations get discussed in meetings with the client. However, a wrap-up meeting where site administrators can discuss recommendations can be helpful. Examples of working prototypes that are helpful.

Lab 13.3 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) An internal audit should identify

1. _____ Nonperformers

- 1)
- _____ Functionality that the firm is particularly proud of
 - _____ Phase II recommendations

(True/False) Using postproject client questionnaires can help the Web firm to identify

1. _____ Nonperformers

- 2)
- _____ Snags in team communication
 - _____ Which project team members deserve raises

Chapter 13: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

What kinds of problems among the

1) project team might the project manager run into by conducting an internal audit? How can they be avoided?

2) How would you approach a client who is certain that a Phase II recommendation should have been included in Phase I?

Chapter 14. Web Firm Start-Ups



"During the gold rush, who made more money? The miners? Or Levi Strauss?"

Kim Round

Chapter Objectives

In this chapter, you will learn about

- ✓ [Evaluating Financing](#)
- ✓ [Marketing](#)
- ✓ [Work Flow](#)
- ✓ [Reputation Page](#)

Those people who have spent a significant amount of their lives working for someone else may find the prospect of owning and operating their own business both terrifying and thrilling at the same time. Having done it, I can easily say that the feeling doesn't necessarily go away,

although I do get to sleep more than I used to.

The Web is opening up all sorts of entrepreneurial opportunities for people who may not have ever considered themselves potential entrepreneurs. Like many of my contemporaries, I planned on settling in with a nice corporate engineering job and seeing it through. However, when two babies came into my husband's and my life, I wanted to spend some time at home with them. I dreamed of a career that would allow me to

adopt the parenting style that I was comfortable with while challenging my intellect. In a sense, it started out as a way to bring in a modest second income while giving me the time to tote my boys to softball practice. Now, I could work twenty-four hours a day, and I'm always grateful to have these opportunities, although I can't explore them all. Many of you have individual reasons for wanting to explore this territory. Maybe you're unhappy in your present job. Maybe you've always dreamed

of running your own business. Perhaps you've fallen in love with creating Web sites, and you see an excellent business opportunity.

My Web company started with an online class through the University of Massachusetts at Dartmouth. My class project was a four-page Web site that I built for my husband's hardware store. I never intended for it to go any further than that, but I began to dream about the name of the firm that I would have and the people I would like to work

with. Soon, I had some very nice people who were interested in sharing this dream with me, but we had no idea about how to get the word out. All of us had worked for other companies, and we had no idea how to market ourselves and get work. Plus, straight HTML does not make a Web firm. I needed to find one or two talented graphic artists and come up to speed very quickly on some hardcore interactive programming. There was a nice period in which I could expand my knowledge by

taking yet more courses in Web development while I picked up a job or two. Had I planned it that way, I would have thought it was a conservative and prudent approach. However, the truth was that I couldn't wait until I had some serious business coming through the door. If that did not happen, I felt like my whole endeavor and all the hard work would be for naught, and I was anxious to make the dream fly.

Of course, impatience is always an enemy. For someone who is growing a Web firm organically,

it can be frustrating to wait for calls to come in. After all, the day you turn on a business line doesn't mean there is an automatic listing in the yellow pages. And even so, the business of Web site design is very similar to that of carpentry or even dentistry. Most potential clients would prefer to be referred to someone who is good. Web development is truly a "Don't tell me . . . show me" type of business. If a new firm doesn't have many Web sites to show, it can be difficult to gain

credibility.

I vividly remember agonizing over every new tool that I bought. After all, if the Web biz didn't take, what was the point of having so many books and software programs? However, as the old adage goes, "You have to spend money to make money." Unfortunately, there wasn't a whole lot of money to spend. Surf's Up literally started from nothing. In the winter of 1995, I spent \$200 to pull apart an old 486 computer and add a sound card, video card, and modem. You could

say Surf's Up was built organically from the microchip level.

Another hurdle many new Web freelancers or firms face is that while they may be excellent technicians, they may not have been trained to do technical sales. Most of us hate going for job interviews, let alone having to sell ourselves every day. This was one of the biggest nerve-wracking activities for me. As I would get ready to go into a potential client's office, my palms would sweat and my mind would be more focused on

how to get the job than truly evaluating the project at hand. During this period, I was asked to get up and give a ten-minute presentation about my company. Not having done this before, I don't think I was a very engaging speaker.

However, after representing myself for six months or so, I began to relax. Now I rarely think about whether I'll want the job and not get it. Rather, when I go to see a new potential client, I'm in screening mode. I want to evaluate the project, the client,

and what my firm can bring to the table. This isn't because I need the work any less than I did back then. I probably need it more. I have overhead now. Rather, this attitude is just a result of building up a little self-confidence and knowing that it's much better to walk away from a job that isn't a good fit than to struggle through it and lose money. If the potential client would rather have someone else do the job, I know that it rarely has anything to do with me. The other firm may have an

incentive that the client feels more comfortable with. The project must be a good fit for both sides.

What I do try to do is limit my exposure to taking too many meetings, which may not pan out. Before I take the time to meet with a client, I want to know that the client wants a Web site now, not six months from now, so there's urgency. I want to hear that there's been some research and preparation done ahead of time, so I know there's some commitment. And I want to know if the client is

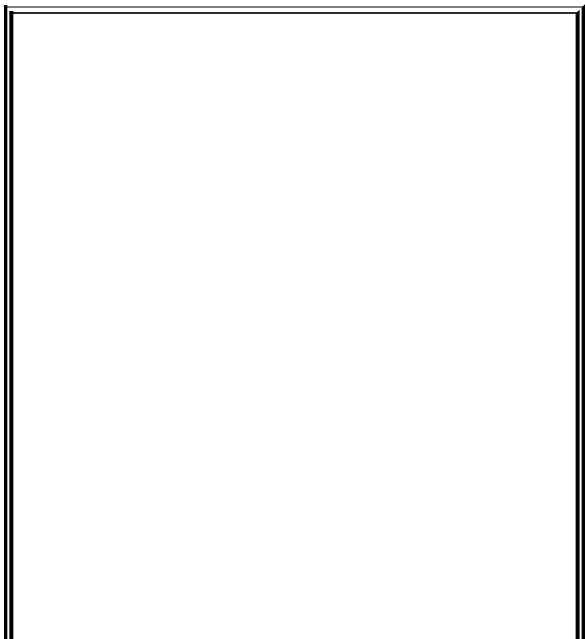
aware of what Web development can cost. Any other scenario makes for a waste of time and energy.

Like other people in creative occupations, Web developers have to watch the expectation on the part of a client that work can be done on "spec." So often I ran into clients who showed me a Web site that some well-meaning Web developer had begun for free, to give the client a view of how the Web might increase their business, only to have them ask me for a bid. The free work

was not respected. It never is. Many potential clients who aren't serious about paying a professional firm to do a good job on a Web site are very quick to ask for "spec" work. The only thing a Web developer has to sell is his or her time. Don't give it away for free. You might as well throw money into the street, no matter how much a potential client assures you that they just need to see "something" before committing. Web developers can point clients to other sites that they have built, if the business

owner needs assurance of their skills. If you need to build a few free sites to broaden a portfolio, build them for nonprofit or charitable organizations that might not be able to afford a Web site ordinarily. Your work will be appreciated, and it will do some good.

Lab 14.1: Evaluating Financing



Lab Objectives

After this Lab, you will be able to

- [Analyze Current Resources](#)
- [Determine Need for Outside Investors](#)

You don't necessarily have to build your business purely organically. There are many options available for people who are willing to define what they want to accomplish and put it into a business plan. However, you have to

determine what your prospective Web firm might have to offer, which makes it worthwhile for other people to be interested in it. Is it the talented people who would contribute to projects? Is it your innovative approach to the Web? Is it an ability to make a Web-based product that can be resold?

Venture capital and bank loans can pave the way so that a Web firm can effectively market itself, giving the firm the exposure to build up a nice portfolio and hire talented

individuals. However, a bank loan generates risk. Venture capital implies a partial or total loss of ownership interest. Some term venture capital as "vulture capital." Unfortunately, most people cannot enter into a viable Web business, which is going to generate an acceptable level of revenue right away, unless there is some outside funding.

So you don't want to mortgage your house or beg for OPM (other people's money). A nice way to begin is to start building Web sites part time. At Surf's

Up, we've used many contractors who are only available at night or on weekends. This gives us the flexibility to use highly talented individuals on a project-by-project basis without having to carry these individuals during slow periods. For the subcontractor, hooking up with another Web firm in this fashion is not a bad idea. It's a great way to ease into the business and put away a little seed money without assuming a great deal of risk. While helping out at a large Web firm

in Boston this summer, I was surprised at how many of the team members freelanced. They spent their days working on projects for the firm and then went home to their own lucrative projects. These people have the security of a regular paycheck while having the opportunity to run and bid their own Web projects. It's a very exciting time for skilled Web professionals. There's plenty of work if you know where to look for it.

Lab 14.1 Exercises

14.1.1 Analyze Current Resources

Who do you know who has excellent Web programming, editing, etc.) do these people

a)

What kinds of attachments might you have?
If you belong to the chamber of commerce
Would you be willing to join?

b)

What are your best skills? Are you a good programmer?

c)

14.1.2 Determine Need For Outside Investors

Research venture capital. Would this be a

Handwriting practice lines consisting of 15 sets of three horizontal lines (top, middle dashed, bottom).

a)

Handwriting practice lines consisting of 3 sets of three horizontal lines (top, middle dashed, bottom).

Research commercial loans through a bank or credit union. Do they require collateral?
Can you get a loan without collateral?
What are the interest rates?
What are the terms of the loan?
What are the fees?
What are the requirements?
What are the risks?
What are the benefits?
What are the alternatives?

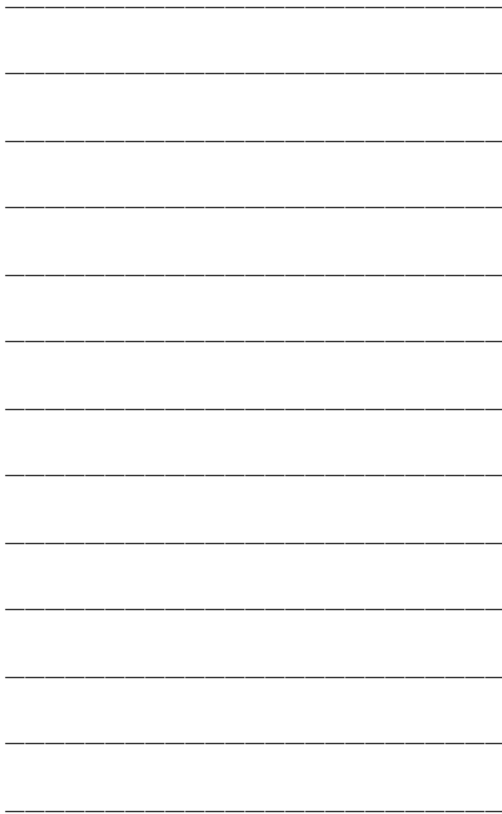
b)

Lab 14.1 Exercise Answers

This section gives you some suggested answers to the questions in [Lab 14.1](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

14.1.1 Answers

Who do you know who has excel programming, editing, etc.) do th



a)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

As more people become interested individuals available who are well very lucky in that I am exposed to the classes that I teach. Some of indispensable team members. How Webmaster certification program individual's skills first hand before her.

There are several crucial points to be aware of what your best skills are

Answer:

Rule 2: Hire up. Don't be afraid to hire more than yourself. They can only enhance your attitude and you can feel pleased. When feeling insecure, it's a wonderful opportunity to exceed expectations.

In forming your own project team

*co-workers. Who has skills that w
team player attitude? Who has th
level? Who respects your time an
mentoring. Get good competent p
skilled Web professionals, get pai
After you've made your first milli
need of grooming.*

What kinds of attachments might
you belong to the chamber of cor
Would you be willing to join?

b)

How can you generate business or generate business is through work are more comfortable doing business and have confidence in.

Answer: *One doesn't necessarily want to be a salesperson. Often, these people they know, including family members, insurance. However, it might be good who has a business that could be*

What are your best skills? Are you a programmer?

Handwriting practice lines (dashed lines on a solid background).

c)

Handwriting practice lines (dashed lines on a solid background).

My strong points are that I am a project flow, and I interact well with project team is an excellent concept advertising and marketing, Charlie trying to send and come up with ideas based media. We always tease each client, I'm thinking, "How does it

Answer:

it say?" This way, we balance each member who is a terrifically talented. Charlie's concepts to create a beautiful comes from a natural feel for art is a natural one. Without my team manager, and client account manager keep this in mind and hire people

14.1.2 Answers

Research venture capital. Would t

a)

*When I first heard someone refer
he was talking about the Vietnam
Web firms as freely as they talk about
venture capital, used wisely can justify
investors and the company founders*

*There's a lot of money to be had
are a lot of inexperienced people*

ill-conceived business plan. If the this is valid consideration. However, dime has been turned is risky at a piece of your business. If you want for greater flexibility to exercise your boss for another should your business

Answer:

Another option is angel capital. Using diluted to the same extent as venture money involved. However, \$30,000 a good marketing effort while avoiding intensive loan application procedure

Research commercial loans through your business plan?

b)

If you have good personal credit, \$30,000 to \$50,000 to initially run advertising can be expensive. Also if they can come into an office at office. My firm has been operated we've saved a great deal of money problems time to time with clients we were carrying such low overhead these folks are not educated as to They jump to conclusions. Sometimes a home office is not serious. Then opening one's home to the public,

Answer:

generate a little seed money to get firm to get money flowing through professionals.

Lab 14.1 Self-Review Questions

In order to test your progress, you should be able to answer the following questions:

(True/False) Angel capital can be more preferable to a bank loan in that

1. _____ Ownership interest in the Web firm is not diluted.

1)

- _____ If you have poor or nonexistent personal credit, it is a viable cash resource.

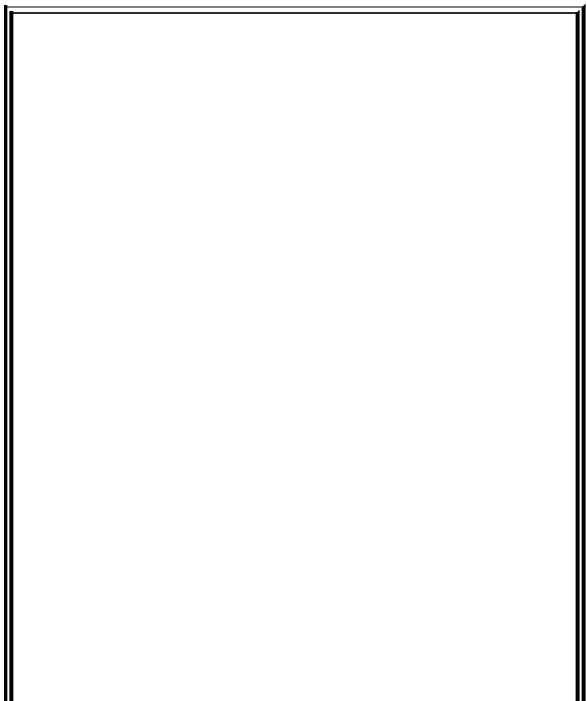
(True/False) If I were a strong graphic designer, I would want to hire

1. _____ **A good multimedia professional**

2)

- _____ An ASP and/or VB Script programmer
- _____ An administrative assistant

Lab 14.2: Marketing



Lab Objectives

After this Lab, you will be able to

- [Utilize Networking Opportunities](#)
- [Develop Strategic Partnerships](#)
- [Analyze Advertising Options](#)

How will we get the work?
That's what most Web firm start-ups ask themselves. You can have all the talent in the world available to build Web sites, but without opportunities to bid projects, there is no way

to win them and knock client's socks off. After all, most Web firms worth their salt could build an attractive Web site for the White House, but who actually gets the opportunity to do so? It's all about contacts.

After a while, when there is enough work out there, the phone will ring because of word of mouth referrals. However, until that occurs, a Web firm will need to make the effort to network with other business professionals in order to attract work and build strategic partnerships. Advertising, while

I do not believe it is the best option, is still a consideration. You want to build relationships that lead to not only one or two projects but a steady stream of projects. If you can establish an easy working relationship with a complementary business entity, where you can bring something to the table for this company as well, and treat this relationship like gold, this relationship becomes invaluable for everyone involved.

Nothing annoys me more than when another business entity

calls me and basically announces that they are on the scene and I will definitely want to use them because of how great they are. They are offering me nothing to do business with them. Rather, they want me to send all of my hosting and/or equipment leads their way but aren't willing to work in a mutually supportive fashion. I'm very proud of the supportive relationships I have built up over the last few years with other businesspeople. I'm excited to hear of their successes, and we encourage

each other. When I hear of someone who needs a good florist or bricklayer, I know businesses I'll recommend. That doesn't mean I'll recommend any business that isn't wonderful, because I will not make such a referral and steer someone wrong. Such an action devalues my integrity. However, with those businesses that provide excellent products and services, I am happy to be supportive if I see a sales lead for them. In fact, I will look for leads for others when I'm in a meeting with a client who

seems to be a good person to do business with. This is how businesses get ahead. However, many Web firms start up considering whether they should bring on a Flash programmer before they take the time to build relationships in the business community. Much of my work comes from word of mouth referrals through other business owners. If I keep them in mind, they will be sure to speak up if they hear that someone needs a Web site.

Therefore, I see the business

referrals that I can generate as marketing opportunities for my own business. This doesn't mean that I keep score. No one can do that. Sales challenges are different for every industry. However, if I am going to be sending clients to a hosting company, I prefer that they know who I am and that I am generating business for them, so that the next time someone asks them about a Web developer, they will remember me.

Even though the firm must always be on the lookout for

new clients, a Web development company should act as a cheerleader for existing clients. It's a tremendous opportunity to get to know other industries and industry leaders and aid these businesses in growing. If a client feels that you are on their side and are truly wishing the best for them, this goes a long way not only to facilitate the project but to generate word of mouth referrals. The client wants to see your firm be successful too, not only because he or she senses your

sincere wish to help grow his or her business but because the client wants you to be around in the future to continue to do so. So it's always helpful to choose clients whom you respect and can easily get behind.

Of course, Web development could be considered an advertising medium, among other things. A Web developer has the unique knowledge of understanding how to market businesses over the Web and can apply those techniques to his or her own firm. Some Web

firms do radio and print advertising. However, one must have the portfolio to show prospective clients online, before most people will initiate a contract. A good marketing representative, whether it is you or your partner, who has excellent communications skills can engender trust among potential clients and work to build that portfolio.

We've discussed before the pitfalls of telling a client that you are able to leap tall buildings at a single bound in order to get the contract. We

know this is a recipe for disaster. Most good clients respect someone who can say "I don't know" or "I'll have to check into that" or "I'm sorry, but that's beyond what I can do." It's important to be open and honest. No matter how much you're burning to do this potential client's Web site, if you're not absolutely sure that you can meet and surpass the requirements, don't waste their time. This is where a decent sales representative, who also has good technical skills, can be a key player on the team. In

networking meetings, this person will not hang the moon on their Web company as being all things. Very few Web firms are all things. Some firms' strengths lie in their innovative designs. Others are very strong in cutting-edge programming. Yet another firm might specialize in multimedia presentations. A sales representative who can screen projects that are unsuitable for the Web firm because they don't lend themselves well to the firm's current resources is golden. This type of person

breeds trust for your firm in the business community.

No matter what, despite all of your good intentions, a difficult client who isn't paying attention or refuses to allow you to educate them about the process of building a Web site will love to accuse you of boasting that you could provide certain services and have fallen short. However, this is usually not the firm's fault, nor should the sales representative beat himself or herself up about this situation. Most of this problem lies on the client side, and the

firm must employ good project management procedures to document client requirements and how they were responded to.

Let's examine what kinds of opportunities might be available to help you to build and keep the right type of clientele for your Web firm.

Lab 14.2 Exercises

14.2.1 Utilize

Networking Opportunities

How would you define a networking opportunity?
good one?

a)

Can you identify three groups through w
to your business?

b)

14.2.2 Develop Strategic Partnerships

What is a strategic partnership?

a)

Identify several types of businesses thro
beneficial strategic partnership.

b)

14.2.3 Analyze Advertising Options

Who is your target audience?

Handwriting practice lines consisting of 10 sets of three horizontal lines (top, middle, and bottom lines).

a)

Handwriting practice lines consisting of 3 sets of three horizontal lines (top, middle, and bottom lines).

What kinds of advertising options might

b)

Lab 14.2 Exercise Answers

This section gives you some

suggested answers to the questions in [Lab 14.2](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

14.2.1 Answers

How would you define a networki
good one?

a)



First, you need to analyze the type of people you want to build educational Web sites. If you want colleges, then you will want to attract people of all ages. If all of the people of college age or older of people may be present.

If you want to build commercial Web sites, you need to know where viable corporate entities may be present.

A networking opportunity is any event that is present and open to discussing business. If your friend's father owns a computer store, it may not be a good idea to make a sale. It generates resentment. However, if you know how the store is going. Out of politeness, you might ask you what you do. If you are a store that specializes in online stores, then you may ask you more about it or you may ask you more about your services. After a while, you may for opportunities to increase their sales. If you haven't stuck your foot in your mouth,

Answer:

However, the more traditional network is in a more formal setting. The people are there for the reason of networking their business and talking about the other businesses that are in the area.

Elements that make for good networking are businesses of complementary but not competing businesses that would lend themselves to each other. Preferably this meeting allows for a lot of discussion, opposed to being focused completely on one person speaking, there is little chance to mingle or disperse after the speakers finish their presentation rather than an informational meeting.

Also, I wouldn't bother to show up if no one in development firms are attending, unless I felt that the product or service was something that might be used by the other people. I would mix with other Web developers and people that are common to all and view this occasion as a chance to network.

Can you identify three groups that are important to your business?

b)

Entrepreneurial groups are always
to the group have to have the abi
directly influence the marketing a
Mary Kay representative is not gc

the Mary Kay Web site. However, your employee gifts and give you

Groups like the local chamber of c or the Rotary Club are all good pla

Answer: *you have to be willing to help oth
WORKING. If you aren't willing to
have time to be out for yourself,
quickly. They will shoot their busi
them in a reciprocal fashion.*

*Web site development, from the
and measure attached to it. Hosti
entities might be able to apprecia
people in other industries might n
developer is a Web developer. A l*

14.2.2 Answers

What is a strategic partnership?

a)

*A strategic partnership is a loose two businesses that provide servi
photographer might be able to de
the same is true of Web develop
referring the caterer and vice ver
exclusively. After all, both busine.*

about who else might know who r
services.

Last summer we brought a boat i
in New Hampshire. One of the fir
which was located conveniently fo
sunblock, aspirin, hats, or sunglas
extremely friendly, and we were i
a good place to eat, and they refe

Answer:

This is a type of a strategic partn
waitress where the best place to
have told me to go to the drug st
traffic to each other's establishme
these business owners would let t
service. A strategic partnership ca
marginal service. It will generate

The best kinds of strategic partne
begin to refer each other on the q
that they are mutually sending ea
into something more formal. I wo
hands and ask for exclusivity eith
However, if I know that I'm gettin
sending the other company a maj

arrangement works well.

Identify several types of business
beneficial strategic partnership.

b)

[illegible]

Local Web hosting and advertising partnerships with. I wouldn't need a nationwide hosting company to sell to a big entity. I probably would never have a relationship with. It probably just goes to someone. And anyone worth their salt will probably analyze what I can do for their business to send to them as well.

However, a Web development firm might use a local Internet service provider to get the hosting company provides good value. A firm's ability to implement good value. A company has a T1 hooked up to a local ISP. It's just being co-located on the client's network.

Answer: *Local advertising firms are great. They're excited about Web sites and at the same time, they're excited about an interactive campaign or a print version. They need to do both. A lot of people are doing Web sites, as maintaining a Web site is probably more cost-effective to sell.*

basis. This type of relationship all referrals and strengthens both en

A good strategic partnership does partnership provides another serv but without taking on the expense not a server administrator or som I'm constantly asked about both. electrician, it's best for me to def these other areas. In turn, these to develop a rocking Web site, an themselves.

14.2.3 Answers

Who is your target audience?

a)

Most Web firms like to build either a narrow portfolio demonstrating specific types of businesses to the Web.

Answer: *Your target audience is definitely a portfolio specializing in a certain area. Your target audience is the owners or managers of the companies. If you're building a brand for several businesses, which could benefit from the same advertising campaign.*

What kinds of advertising options

b)

Anything that is a prominent business is a good source of advertising. I would not be a consumer driven with the local ha target market may well be the ha not their customers. Given that n

Answer: *suburbs, if I wanted to step up bu yellow pages rather than the yell commercial businesses that way. contributing tech articles to busin great form of frequent free adver byline can generate name recogn*

Lab 14.2 Self-Review Questions

In order to test your progress,

you should be able to answer the following questions:

(True/False) The following sounds like a good networking opportunity:

1. _____ **A speaker series on small business at the local library**

1)

- _____ Lunch with the owner of an Internet service provider
- _____ A chamber of commerce trade show

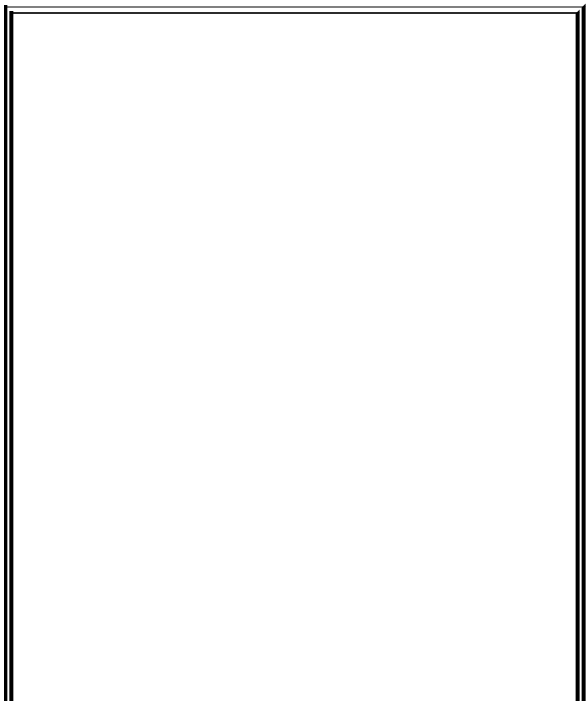
(True/False) The following would be good advertising for a Web development company:

2)

1. _____ **The classified section of the local newspaper**

- _____ Little League jerseys
- _____ A church bulletin

Lab 14.3: Work Flow



Lab Objectives

After this Lab, you will be able to

- [Keep Business Coming In](#)
- [Determine Personnel Requirements](#)

Sometimes I feel like an errant girlfriend, interested in dating but afraid of deeper commitment. Since I'm an old, long-time married lady, I'm not really referring to romantic attachments. Rather, from a business standpoint, I

understand that firms can experience highs and lows in the number of project contracts they undertake. I never want to take a project that I'm uncomfortable with because I have a lot of overhead to support. Unfortunately, employees contribute to overhead. I need competent people available when I need them, but don't want to carry them when I don't have enough work to support everyone comfortably. Thus, this generates my "dating versus deeper commitment" dilemma.

I'm always afraid that people will tie themselves to me exclusively and then project work will dry up and I'll have to let them go.

How do you keep work coming through the door so that talented people will be interested in working with you on a regular basis? How do you make sure that you have people available to do the work when it comes in without hamstringing yourself when there isn't enough?

This is where strategic

partnering can extend to getting work done. Surf's Up has been able to expand its ability to take on many kinds of projects because we use highly conscientious and competent subcontractors. Because of this, we can easily take on multimedia, NT, and UNIX projects seamlessly. My subcontractors and I have all worked together on projects before, so it feels like we are long time co-workers. However, we all understand that we work together when there's work, and when projects can be

handled in house, that's understandable, and it leaves these people free to pursue other projects. If my NT contractor has a UNIX project, I jump in and help him. If I have an NT customization situation, he jumps in and helps me. We shoot each other RFQs (requests for quotes) as they come in and draft bids together, so that neither party gets stuck with a big bill that eats away at project profits. It becomes a virtual organization. However, if there are people that you can trust implicitly along the way, it

broadens the scope of the projects you can bid on.

Through strategic partnering and supplying excellent customer service to existing clients, a Web firm can expand the number of projects it's available to bid and is a firm that the clientele will approach again for upgrades and maintenance of their existing Web sites. If I've had a client who was extremely difficult to get through the Web build, I would rather that my firm isn't approached for maintenance. Most likely, it will be

unprofitable. However, I'll bend over backward to keep our other clients. I want them to know what we're up to, and if we did their Web site a year ago, there are additional things we can do for their Web site. I'm hoping the client will want my firm to do an upgrade, that they had a good experience with us the first time and will want to work together on an ongoing basis. So you must not consider a project a one-time association. A good Web firm should be in business to earn the client's business for the

long term. This generates repeat business and business by referral.

If the Web firm is attracting a lot of business, it's important to keep a list of talented and reliable people to call on for help. Sometimes it takes a few stubbed toes to select good subcontractors. When I first started out, I remember arranging a meeting with an ISP and going on about a graphic designer that I had available. I had seen some of his print work and a little Web work, and I was impressed with

what I saw. I was told that he had done Web sites, and I trusted that there would be many to show a prospective client. So I really went on faith. When the ISP asked to see his work, I passed along the request only to find out that when it came down to it, we had nothing to show. This was an extremely talented graphic artist, but how could I get prospective clients to buy into this situation without work that was easily accessible to show them? By this point, I had blown my credibility with the

ISP, and I had wasted their time. It took me a little while to understand where and how to use subcontractors. You should have several people in each discipline to call upon and always ask for a broad portfolio. A prospective client will ask for one. Unfortunately, you can't do projects with people because you think they are wonderful individuals and like them. It's not like the garage rock bands that we formed when we were kids "Well, we need a drummer, so my best friend

Jimmy can figure it out we gotta fit him in." Even if an individual is extremely talented, you have to see that he or she also has the ability to take on a project and deliver it on time successfully.

Once a subcontractor slips a deadline with me, that's the end. I'm not talking about unforeseen circumstances, server glitches, or blowing a few days past the deadline ending the relationship. But if I'm a week or two past a delivery date with a client for no good reason, I'm going to

reevaluate whether I will use the subcontractor again. So, over time, you can build up a trusting relationship based on performance.

In the following exercises, you can evaluate how you might handle the various issues involved with keeping a good level of work flowing through a firm and allowing for the ebb and flow of personnel requirements.

Lab 14.3 Exercises

14.3.1 Keep Business Coming In

How would you generate business amor

a)

How much effort should you, the owner
new business as opposed to working on

b)

14.3.2 Determine Personnel Requirements

What kinds of questions might you ask a

Handwriting practice lines consisting of 10 sets of three horizontal lines (top, middle dashed, bottom).

a)

Handwriting practice lines consisting of two sets of three horizontal lines (top, middle dashed, bottom).

When should you bring on employees?

b)

Lab 14.3 Exercise Answers

This section gives you some suggested answers to the questions in [Lab 14.3](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

14.3.1 Answers

How would you generate business?

a)



There are several ways to generate a newsletter, either through e-mail or by mail. To keep your firm in mind the next time you receive a newsletter can be informational for you. It can also contain ideas regarding upgrades and maintenance. A newsletter keeps your clientele informed, makes your site successful, and able to determine your needs.

Answer:

Another very helpful way to generate a newsletter is to send every month or quarter and send it by mail. It can be attached to each printed Web page or sent by e-mail. You can also make any changes on the Web page.

Some Web firms offer their clients a discount on their services so much for the year, and that can be a very helpful way to generate a newsletter.

How much effort should you, the owner, put into a new business as opposed to working for someone else?

b)

*At first, it seems like generating revenue is a lot of work.
After all, in the beginning, it's time-consuming.*

*However, once the Web firm is up and running, the work
does not cease. Most owners pro-*

*new business for the Web firm. W
project, following up project bids,
a very important part of the Web*

Answer:

*Sometimes if we're going through
contracts, I will back off on the n
that we might need to build in so
finished. However, I always give
You can do very well on a contrac
because the firm is so busy doing
lucrative. The Web firm owner ca
present production cycle. There's
contract.*

14.3.2 Answers

What kinds of questions might yo

a)

[illegible]

I would ask the following question

- *Could you supply a list of W*
- *Could you describe your pre*
- *What are your best skills?*
- *Do you have references?*

Answer:

- *Will you have any trouble m*
- *Can you work with the paym*
- *If you do not make the deac
making the deadline, do you*
- *Where and how can we cont*
- *When will the work be perfo*

When should you bring on employ

b)

*I would not bring on employees u
with a steady income. Unless the
big budget to work with, you have
brought on board as employees, u*

mind giving people pink slips after

*Don't hire people whom you can't
should have a pretty good idea of
demand for every project and sub
when you know the need to hire s
well overdue. It's easy for the sc
requirements. However, if the ne
consistent through a slew of proje
this person will have a role in any
necessary.*

*Of course, being the noncommittal
keep a small internal staff.*

Lab 14.3 Self-Review Questions

In order to test your progress,

you should be able to answer the following questions:

(True/False) The following methods are probably good ways to generate business:

1. _____ Sending e-mails to people who you think have poor looking Web sites, offering your services to improve them

1)

- _____ Telemarketing
- _____ Offering a Web workshop for small business owners

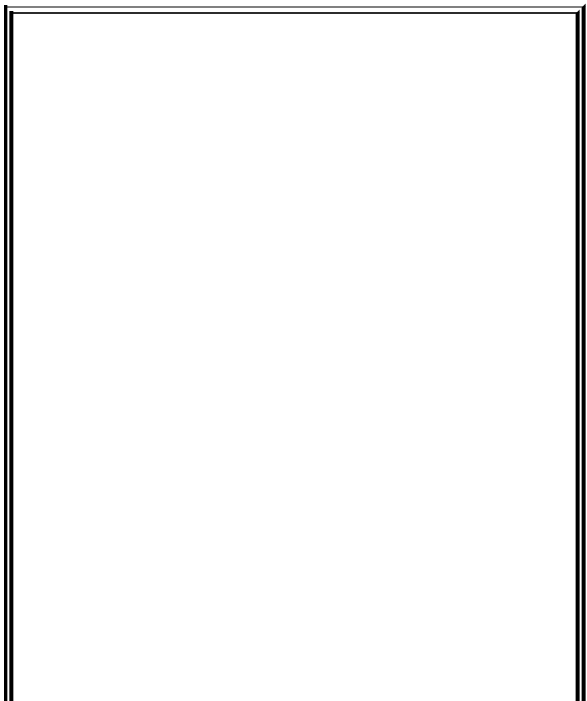
(True/False) Web firms regularly use the following types of employees:

1. _____ **Project managers**

2)

- _____ Administrative assistants
- _____ Flash programmers

Lab 14.4: Reputation



Lab Objectives

After this Lab, you will be able to

- [Charge Clients Fairly](#)
- [Underpromise and Overdeliver](#)
- [Understand the Value of Reputation](#)

Some Web firms love to go for an eclectic image. They may wish to have a reputation for innovative design. This office may operate in a laid-back way that allows people the freedom

to dress and behave in a way that fosters creativity and allows for individuality. Other firms, which are in a ferocious search for venture capital, may want to present a more buttoned-down image and a strong entrepreneurial focus. Which type of reputation do you want your Web firm to have?

Of course, so much depends on who you are and what your goals may be. However, never confuse image with reputation. Image is superficial. Reputation is set in stone and is based

upon performance. Let your image feed into the reputation you wish to create. However, do not let image drive your reputation.

Reputation is about quality of work, fairness, and doing the things that you say you are going to do when you say that you are going to do them. I knew of a firm that was in a big search for venture capital. Eventually, they got it. However, in the beginning, their focus on customer service was lacking. They were not concerned with their reputation

among their existing clientele. Once that focus changed and the firm was concerned with providing a service that simplified the process for their clients, they did receive venture capital. So, by taking care of business correctly, the firm eventually got what it wanted.

Everyone is in business to make money hopefully, lots of it! However, as in any business, your own personal set of ethics will drive how you make your money. It's often best to walk away without a dime, maybe

even owing one, than to allow the reputation of the firm to be tarnished. I'm not advocating letting people walk all over you, because, unfortunately, as your business grows, you will be dealing with all kinds of people and some may surprise you, despite your screening efforts. However, I would never want someone who is mostly reasonable to walk away from my firm feeling that we were unfair to him or her. You can make a mistake programmatically, but hopefully not too many. Maybe the

graphics don't necessarily meet the client's liking. However, all of these things can be fixed. If you are unfair to a client, in pursuit of padding your own wallet, it's obvious, and these kinds of transgressions aren't forgiven in the business community. They ruin strategic partnerships and no one feels comfortable referring business to you.

Lab 14.4 Exercises

14.4.1 Charge Clients

Fairly

How would you develop a price list that

a)

If a client is unhappy with the quality of y
should you ask yourself? How would the

b)

14.4.2 Underpromise And Overdeliver

What do you think the statement "Under

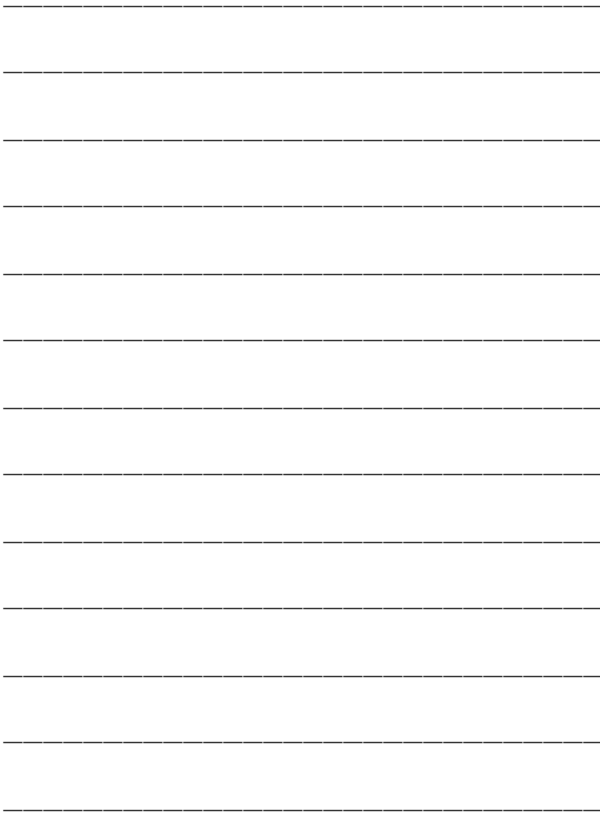
a)

Describe ways that you "underpromise and overdeliver" on your website.

b)

14.4.3 Understand the Value of Firm Reputation

What kinds of positive outcomes can occur from your Web firm?



What kinds of actions might contribute t

b)

Lab 14.4 Exercise

Answers

This section gives you some suggested answers to the questions in [Lab 14.4](#) with discussion related to those answers. Please post any alternative answers to these questions at the companion Web site for this book, located at <http://www.phptr.com/phptrinte>

14.4.1 Answers

How would you develop a price list

a)

You may consider calling a nonco city, and inquiring about procuring several models for Web sites that they would handle the bid. Often through our Web site. We can use because there isn't any contact in mail address. When we write back the project, we never get a response other developers who are trying to caught on and don't respond with information. However, if you call firm, you might be pleasantly surprised.

Another option is to talk with a local

Answer: *grapevine what is being charged to with someone at the ISP is a disc be charging. Prices differ by regio complexity of programming.*

You might also consider research. firms do not post pricing online, b depending on the amount of over What's the difference between a . Usually the difference lies in the a amount of time or to take a team

Do not steal space in a busy pers you need to have a price on. Whe However, if someone calls you ar or hire you for an hour of consulti

If a client is unhappy with the qua should you ask yourself? How wc

b)

Sometimes it may seem like the before you make that determinat actions during the execution of th your client may have a point, it's in the way and try to understand means cutting the client a break along the way they could have be

Answer:

*Once in a while, a client will atten
This is a much different scenario.
reason why you should bend to th
situation where you can assign sc
sense to make amends by either
by cutting a little off the final pay
securing the client's long-term bu*

14.4.2 Answers

What do you think the statement

a)

Those of us who grew up with Star Trek: The Next Generation he addressed underpromise and overdeliver who never shaved any time off of what complete a task to try to pacify him I'm not suggesting that anyone p little leeway doesn't hurt. Nothing

Answer:

*expectation, being assured by the
expectation, and finding that the*

Describe ways that you "underpro
site.

b)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Previously, we spoke about not skimping on underpromise and overdeliver, but simplifying a user interface can accomplish the same without spending some extra money on Internet-related, as opposed to people. I've had several clients whom I've warned about after giving project updates. It's

Answer:

The worst thing that you can do is to promise too much and fall short of expectation, do not promise it. If you can, pleasantly surprise your client.

14.4.3 Answers

What kinds of positive outcomes

This image shows a blank sheet of white paper designed for handwriting practice. It features ten evenly spaced, horizontal dashed lines that run across the width of the page. These lines are intended to guide the placement of letters, helping learners develop consistent letter height and alignment. The background is plain white, providing a clear contrast for the grey dashed lines.

If your firm has a good reputation

- *Bid bigger projects.*
- *Charge the going rate for de*
- *Attract more business.*
- *Have more credibility with c
a technical or creative direc*

Answer:

What kinds of actions might contri

b)

- *Charge fairly.*
- *Deliver projects on time.*
- *Underpromise and overdeliver.*

Answer:

- *Deliver project according to the contract.*
- *Provide excellent customer service.*
- *Truly care about the client's business.*

efforts to simplify it.

Lab 14.4 Self-Review Questions

In order to test your progress, you should be able to answer the following questions.

(True/False) The client is unhappy that his finished site does not exhibit multimedia capabilities, which were not previously discussed.

1. _____ The firm should consider refunding money.

- _____ The firm should consider offering an upgrade gratis.
- _____ The firm should offer an upgrade at a discounted price.

2) (Yes/No) Is the customer always right?

Chapter 14: Test Your Thinking

The projects in this section use the skills you've acquired in this chapter. The answers to these projects are available to instructors only through a Prentice Hall sales representative and are intended to be used in classroom discussion and assessment.

If you were going to start your own

- 1) Web firm, what type of financing would you pursue and why?
- 2) Based on this financing, how would you market your firm?

Should you concern yourself with the

- 3) firm becoming so busy with projects that you will have to turn others down?

Name two other ways that have not been discussed in which your firm could cement a good reputation in the business community.

- 4)

Appendix A.

ANSWERS TO

SELF-REVIEW

QUESTIONS

[Chapter 1](#)

[Chapter 2](#)

[Chapter 3](#)

[Chapter 4](#)

[Chapter 5](#)

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[Chapter 9](#)

[Chapter 10](#)

[Chapter 11](#)

[Chapter 12](#)

[Chapter 13](#)

[Chapter 14](#)

Chapter 1

Lab 1.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

d

Good pricing is a basic marketing principle that also enhances relationships. Personalized interactions,

customized
ordering, and
personal
suggestions drive
relationship
marketing.

	Question	Answer	Comments
--	-----------------	---------------	-----------------

A2:

2		
---	--	--

	c	
--	---	--

		Although this depends on your situation and your audience, electronic mail is the easiest, cheapest, and most efficient communication
--	--	---

method going.

Question	Answer	Comments
----------	--------	----------

A3:

3

False

Though the technology is evolving, some type of networked computer communication is fast becoming the primary business communications model.

Lab 1.2 ■ Self-Review

Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

e

The Web provides a multitude of technologies for direct customized communication between customers and marketers.

Question	Answer	Comments
----------	--------	----------

A2:

2

a,b,c

Branding and sales calls are traditional marketing methods that are more expensive than relationship marketing techniques.

Question	Answer	Comments
----------	--------	----------

A3:

This is now also

3

a

your responsibility
to your audience.

Chapter 2

Lab 2.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	a,d	So many options and a business need to measure success are the two most compelling reasons to plan
---	-----	--

first.

	Question	Answer	Comments
--	----------	--------	----------

A2:

2

Who

What

Where

When

Why

How

The basis of
concise and
effective
communication
was stolen
directly from
Journalism 101.

Question	Answer	Comments
----------	--------	----------

A3:

3

False

Real planning is rarely considered in the rush to the Web.

Lab 2.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

c

Who defines the audience. The communications target.

Question Answer

Comments

A2:

2

b

The audience defines the presentation development. The presentation must be targeted at the audience.

Question	Answer	Comments
----------	--------	----------

A3:

3

b

While free stuff may attract one audience, targeted content will attract the appropriate one.

Lab 2.3 ■ Self-Review Answers

	Question	Answer	Comments
--	----------	--------	----------

A1:

1

c

Without interaction, a Web site is a repurposed brochure.

	Question	Answer	Comments
--	----------	--------	----------

A2:

2

False

We can (hopefully) skip the early levels and begin meaningful communication quickly.

Question	Answer	Comments
----------	--------	----------

A3:

3

a,b,c

All are examples of business transformation through Internet communication. I wouldn't become a travel agent right now.

Chapter 3

Lab 3.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	a	Searching the classifieds is a means to get the end.
---	---	---

Question	Answer	Comments
----------	--------	----------

A2:

2	c	In this world money talks loudest.
---	---	------------------------------------

Question	Answer	Comments
----------	--------	----------

A3:

3	True	Use by a targeted audience is the reason you got onto the Web in the first place.
---	------	---

Question	Answer	Comments
----------	--------	----------

A4:

4

d

Tactic should be employed to complete a strategy that fulfills wants, needs, and desires by providing useful information and transactions.

Lab 3.2 ■ Self-Review

Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	d	A newspaper, magazine, or Web site banner as may be seen by thousands of people, making it the least expensive cost per contact.
---	---	--

Question	Answer	Comments
----------	--------	----------

A2:

2

d

Seen does not mean read or responded to, so although space advertising is inexpensive, it is not very valuable for relationship marketing.

Question	Answer	Comments
----------	--------	----------

Since Internet communication can deliver

A3:

3

b

customized interactions, it provides high value. Although initial development incurs expense, the cost is still low for each contact once in use by the audience.

Question Answer

Comments

Unlike most other communication methods, as

A4:

4

False

Internet communication increases variable costs do not. Major usage requires technology investments, but these can be seen as additional fixed costs.

Question Answer

Comments

A5:

5

True

This is very good news.

	Question	Answer	Comments
--	----------	--------	----------

A6:

6			
---	--	--	--

	True		
--	------	--	--

		This is even better news as Internet communication can replace more expensive traditional methods (e-mail is free versus mail requires postage). And the value of Internet communication can be greater (e-mail is immediate versus
--	--	---

mail takes time).

Lab 3.3 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	b	A plan usually involves moving forward. To do so we must first assess where we are starting from.
---	---	---

Question	Answer	Comments
----------	--------	----------

A2:

2

c

These levels are somewhat arbitrary but useful when assigning qualitative value for comparison purposes.

Question	Answer	Comments
----------	--------	----------

A3:

3

c

Though Internet communication requires technology people for execution, communication is the purpose. And appropriate communication requires communications professionals to call the shots.

Question Answer

Comments

A4:

4

e

Any information exchange can be automated using Internet communication over public and private networks.

Lab 3.4 ■ Self-Review Answers

Question Answer

Comments

A1:

1

b

Though it may not seem so sometimes, the IS department is inside your organization.

Question Answer

Comments

A2:

2

True

Many times, channel participants are a company's biggest or only customers.

Question	Answer	Comments
----------	--------	----------

A3:

3

c

After deciding who we are in communication with, we need to decide what the communication needs are.

Question	Answer	Comments
----------	--------	----------

A4:

External parties have wants,

4	True	needs, and desires and our job as Web communicators is to fulfill them.
---	------	---

Question	Answer	Comments
----------	--------	----------

A5:

5	e	Merrimack College has a partnership with WOW. A relationship with many vendors. A credit card transaction system. And a distributor for its
---	---	---

education
product.

Question Answer	Comments
-----------------	----------

A6:

6

d

All three are possible vendors for an Internet communication system that completes transactions over the Web and ships product directly to customers. Many vendors have been already been

supplying these
services to direct
and catalog
marketers.

Chapter 4

Lab 4.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	d	A good way to build visual presentations involves creating explanations of visual activity or models of them.
---	---	---

Question	Answer	Comments
----------	--------	----------

A2:

2

False

Direction should be given from the driver's perspective. Ever tried it the other way?

Question	Answer	Comments
----------	--------	----------

A3:

3

c

If the home page is the big identifiable road, the first step to to the communications goal involves getting off at an exit.

Question Answer

Comments

A4:

4

b

In this road analogy, the goal is the destination.

Question	Answer	Comments
----------	--------	----------

A5:

5

e

Again, building model interactions is a great tool.

Question	Answer	Comments
----------	--------	----------

A6:

6

d

Fulfillment of wants, needs, and desires is much more important than any fluffy or

dramatic
presentation.

Lab 4.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	b	Assess current activity first.
---	---	--------------------------------

	Question	Answer	Comments
--	----------	--------	----------

A2:

2			
---	--	--	--

	False		
--	-------	--	--

		It is always included in every discussion.	
--	--	--	--

	Question	Answer	Comments
--	----------	--------	----------

A3:

3			
---	--	--	--

	d		
--	---	--	--

		Who, what, and how are always important.	
--	--	--	--

Question	Answer	Comments
----------	--------	----------

A4:

4

a, c

Goals should already be known. But if they are not known, then answering d is OK as well.

Question	Answer	Comments
----------	--------	----------

A5:

Transforming communication to cut costs and

5

e

increase
relationships is
the name of the
game.

Lab 4.3 ■ Self-Review Answers

Question Answer

Comments

A1:

The who, what,
where, when,
why, and how

1	b	always get answered first. Then deal with appearances and technology.
---	---	---

Question	Answer	Comments
----------	--------	----------

A2:

2	d	Again, plan before you build.
---	---	-------------------------------

Question	Answer	Comments
----------	--------	----------

A3:

3

c

Determining communication goals may be a surprising experience.

Question Answer

Comments

A4:

4

e

Since these will be the basis for actual page development, they need to include content, links, and back-end support.

Question	Answer	Comments
----------	--------	----------

A5:

5	True	Aides help the audience reach goals quickly.
---	------	--

Chapter 5

Lab 5.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

d

The big idea is used for all creative development.

	Question	Answer	Comments
--	----------	--------	----------

A2:

2	a,d	Looks involve visuals, which affect people emotionally.
---	-----	--

	Question	Answer	Comments
--	----------	--------	----------

A3:

3	False	Branding is about building recognition. That recognition supposedly
---	-------	---

indirectly inspires sales.

Question	Answer	Comments
----------	--------	----------

A4:

4	True	See above.
---	------	------------

Question	Answer	Comments
----------	--------	----------

A5:

5	c	It's all about engagement of an audience.
---	---	---

Lab 5.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	b,d	Headlines are text. Sound files are multimedia, which is important but not widely utilized. Logos can be considered
---	-----	---

visuals.

Question	Answer	Comments
----------	--------	----------

A2:

2

c

Both should be included for accessibility and ease of use.

Question	Answer	Comments
----------	--------	----------

A3:

Color is a big part

3	False	of emotional response.
---	-------	------------------------

Question	Answer	Comments
----------	--------	----------

A4:

4	True	Text is very effective for some big ideas.
---	------	--

Question	Answer	Comments
----------	--------	----------

Again, it's all

A5:

5

a

about the audience. That's why planning is crucial.

Lab 5.3 ■ Self-Review Answers

Question Answer

Comments

A1:

1

d

Why should the audience care?

Question	Answer	Comments
----------	--------	----------

A2:

2

c

Answer the
"what's in it for
me" question on
behalf of the
audience.

Question	Answer	Comments
----------	--------	----------

A3:

3

True

Question	Answer	Comments
----------	--------	----------

A4:

4	False	It's everything.
---	-------	------------------

Question	Answer	Comments
----------	--------	----------

A5:

5	False	Except in certain situations where they want or have to, people don't read. They just look.
---	-------	---

Question	Answer	Comments
----------	--------	----------

A6:

6

e

Any material can be repurposed as long as it is appropriate.

Lab 5.4 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

d

Basically they all mean the same thing, a fulfilled audience.

Question	Answer	Comments
----------	--------	----------

A2:

2

e

Many exist.

Question	Answer	Comments
----------	--------	----------

A3:

3

True

Beauty is only skin deep.

Question Answer

Comments

A4:

4

a

At least until the next buzz word.
What's after engagement, marriage?

Chapter 6

Lab 6.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	d	
---	---	--

Question	Answer	Comments
----------	--------	----------

A2:

2	b	If you care to play, a top ten result is victory.
---	---	---

Question	Answer	Comments
----------	--------	----------

A3:

3	c	Engines catalog the Web on their own. Directories rely on submissions.
---	---	--

Question Answer

Comments

A4:

4

e

At this time banner ads are basically space ads that provide an immediate response vehicle using click-through.

Lab 6.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

d

A lot of information about software clients, hardware monitors, and the activity generated by promotional efforts can be gleaned from boring log files.

Question	Answer	Comments
----------	--------	----------

A2:

Link history is

2	d	even more valuable for deciding linking strategies.
---	---	---

Question	Answer	Comments
----------	--------	----------

A3:

3	False	They identify a client computer but not a user. But if that user identifies herself, then the connection can be recorded for customization.
---	-------	---

Question	Answer	Comments
----------	--------	----------

A4:

4	c	Reviewing direct communication with people is the best measurement of success.
---	---	--

Chapter 7

Lab 7.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

		A good contract documents the requirements, responsibilities, and price of the project, which, hopefully, means
--	--	---

A1:

1

b,c

that the parties have discussed and agreed on many key aspects of their working relationship and the end product. This process and the resulting document (the contract) should be useful if disagreements arise during the course of the development effort (and afterward). A verbal agreement is extremely difficult, if not impossible, for a

court to enforce.

Question Answer	Comments
------------------------	-----------------

	If you find a mistake in your proposal or offer before it has been accepted, withdraw it immediately! Indicate that you will resubmit. Technically, once an offer has been accepted, you (or the other parties) are obligated to
--	---

A2:

2

a

perform. If you find a mistake in a proposal submitted to you, you may accept it and hold the parties to perform.

However, that may become a "win-lose" scenario, which can quickly evolve into a "lose-lose" for all involved. It is usually better to negotiate out of those situations if the other side has requested a favor (by correcting a mistake in their

proposal or offer), you can request a reciprocal favor from them since they have, in effect, reopened the negotiation.

Question Answer	Comments
-----------------	----------

A3:

3

c

The contract should specify the terms under which it may be cancelled. If any party cancels outside of (or

without) such terms, they may rightfully be subject to suit by the other parties.

Lab 7.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

		It is not illegal to link to another
--	--	--------------------------------------

A1:

1

False

Web site without their permission. It may be bad netiquette, depending on the situation, but it is not illegal. Just be sure that you comply with any terms given on the "linkee" Web site, if there are any terms. And do not make it appear that the contents of another Web site are actually the contents of *your* Web site (as in a "frame"). Use your common sense if you

would object if the positions were reversed, expect them to feel the same way.

Question	Answer	Comments
----------	--------	----------

A2:

	Unless it is otherwise specified in an employee's employment contract, the employer usually owns the copyright to	
--	---	--

2

e

anything produced by the employee in the course of doing the job the employer pays them to do. This is called "work for hire" or "work product."

Question Answer

Comments

If you own a trademark, you must protect it to keep it valid.
Unprotected

A3:

3

True

trademarks lose their effectiveness when other users dilute their original meaning and value.

Question Answer

Comments

The Coca-Cola trademark is one of the most recognizable trademarks in the world and, like any other trademark, should not be

A4:

4

False

used on a Web site without the permission of the trademark owner. There are *many* other ways to add color to your Web site a court would believe that you were trying to leverage someone else's trademark, not just add color. Coca-Cola would probably recover some damages from you for the damage done to their trademark.

Question	Answer	Comments
----------	--------	----------

A5:

5

a,c

Borrowing content without permission is very risky unless you *know* that something is in the public domain. Copyright owners have a right to recover damages from you for use without permission.

Question Answer

Comments

A6:

6

False

Just as you cannot use someone's trademark on the visible part of your Web site without permission, so are you also barred from using that trademark on the "invisible" part of your Web site, like a meta tag. Inappropriate use is inappropriate use. Expect a lawsuit when you are

discovered.

Chapter 8

Lab 8.1 ■ Self-Review Answers

	Question	Answer	Comments
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A1:

1	a,b,d	Don't depend on the client to set the schedule of payment. The firm must determine this and insist that the
---	-------	---

client adhere to
the agreement.

	Question	Answer	Comments
--	----------	--------	----------

A2:

2			
---	--	--	--

	a,b,c,d		
--	---------	--	--

		A good Web firm should concern itself with all of these issues, including saving the client money.
--	--	---

Lab 8.3 ■ Self-Review

Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

a,b,d

The technical team is going to concern itself with using cross-platform solutions, which do not cause browser loading problems. Animations, Java Script rollovers, and multimedia embedded

objects would need support from the technical team.

	Question	Answer	Comments
--	----------	--------	----------

A2:

2			
---	--	--	--

a,e

Creative can put the marketing team a step ahead by identifying key points that are important to the client.

Lab 8.4 ■ Self-Review

Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

b

While coordinating skills comes a very close second, a project manager who does not have excellent negotiating skills will undermine a project every time.

Question	Answer	Comments
----------	--------	----------

A2:

2

e

The project manager plays a major role in every phase.

Chapter 9

Lab 9.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	True	One process does not necessarily complement the other.
---	------	--

Question	Answer	Comments
----------	--------	----------

A2:

2

False

Understanding the process involved can help the project manager to educate the client regarding realistic expectations.

Lab 9.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

False

The project manager should only involve himself or herself in conflicts that inhibit the creation of the Web site. Not all conflicts between team members cause this sort of problem.

Question Answer

Comments

A2:

2

False

Team member conflicts do not always slow down production. However, these conflicts have a great potential to do so.

Chapter 10

Lab 10.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

b

A defined scope of work provides a measure of success. A Web firm cannot be successful without a defined scope of work.

Question Answer

Comments

A2:

2

c

Negotiating is key to
Yes, the project manager
provides Internet
consulting, but the
cannot be made effective
without excellent
communication/negotiation
skills.

Lab 10.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

a

An online banking site will most likely generate the most financial transactions. There is also liability in that customer information must be kept secure.

Question	Answer	Comments
----------	--------	----------

A2:

2

b

Payment schedule is generally included in the work order. The other points can be defined in the project specification.

Lab 10.3 ■ Self-Review Answers

Question Answer

Comments

A1:

1

a,b

Payment schedule is generally defined in the work order.

Question Answer

Comments

New Web developers tend to assess the time spent to code the site and develop the graphics.

A2:

2

b,c

However, they begin to realize after the first few

projects that a significant amount of time can be spent interacting with the client, and this needs to be covered in the bid.

Chapter 11

Lab 11.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

a

Anyone who has
ever gotten
married
understands how
someone else's
taste does not
always echo

one's own.

Question	Answer	Comments
----------	--------	----------

A2:

2	a,b	Document! Document! Document!
---	-----	-------------------------------------

Lab 11.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

a,b,c

A good creative spec should address all of these issues.

Question	Answer	Comments
----------	--------	----------

Use the medium that best conveys the most sensory information to the client. If you are upset with the client, let

A2: 2

c

someone else speak with him or her directly, and then deal with the client when you are more relaxed. Never send e-mail when you are upset.

Question Answer

Comments

A3:

3

none

None of these tools provide a cross-platform solution.

Lab 11.3 ■ Self-Review Answers

	Question	Answer	Comments
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A1:

1	b,c	Credibility is key!
---	-----	---------------------

Question Answer

Comments

A2:

2

b,c

Some Web firms do offer writing services.

However, this needs to be covered in the project bid.

I prefer to stay away from taking on the responsibility of functions with which the client can take issue. The success of a graphic design or written initiative is harder to gauge because it depends solely

upon the client's
taste.

Chapter 12

Lab 12.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	a,b,c	These are all crucial factors.
---	-------	--------------------------------

Question	Answer	Comments
----------	--------	----------

A2:

2

a,b,c

These are all important points as well.

Lab 12.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

This will not mean

A1:

1

a

anything to the client, whereas the version of Perl stipulates which servers the Web site can be hosted on.

Question Answer

Comments

A2:

2

a

Both the project specification and the programming specification should reference the choice. However, the client would have

signed off on the
project
specification.

Lab 12.3 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

a

Human
resources, even
in the face of
illness, is still the

contractor's
issue.

	Question	Answer	Comments
--	----------	--------	----------

A2:

2			
---	--	--	--

	d		
--	---	--	--

			Use people to test the site who have had the least exposure to plans for its projected functionality.
--	--	--	---

Chapter 13

Lab 13.1 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1	c	Place, the way a product is distributed.
---	---	--

Question	Answer	Comments
----------	--------	----------

A2:

2

b,c

Targeted e-mailing is a consumer turn off.

Lab 13.2 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

c

Site administration documentation should be written specifically for the Web site.

However, it should not undertake the burden of explaining other software programs.

Question Answer

Comments

Graphic design
and hardcore

A2:

2

a

programming can be extremely expensive. These should be covered as upgrades.

Chapter 14

Lab 14.1 ■ Self-Review Answers

Question	Answer	Comments
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A1:

1	a,b	
---	-----	--

Question Answer

Comments

A2:

2

b

Hire highly skilled people whose talents complement yours.

Lab 14.2 ■ Self-Review Answers

Question Answer

Comments

A1:

1

b

A strategic partnership with an Internet service provider or an advertising firm can drive more business to your firm than just about anyone else.

Question Answer

Comments

A2:

2

none

Advertise in business-to-business publications.

Lab 14.3 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

c

It's helpful,
positive, and you
have an
interested
audience.

Question	Answer	Comments
----------	--------	----------

A2:

2

a,b

If yours is a small firm, subcontract tasks that are not used regularly.

Lab 14.4 ■ Self-Review Answers

Question	Answer	Comments
----------	--------	----------

A1:

1

c

If your firm is interested in a continued relationship with the client.

Question Answer

Comments

A2:

2

No

One would like to think so and operate under that assumption. However, one can also kiss a Web business goodbye after just a few projects by not covering the firm

with
documentation,
which can prove
the firm's
position.